ETA is a company that strongly believes in evolution, whose goal – since 1978 – is to design and manufacture high quality sheet metal, stainless steel and aluminium Enclosures, combining innovation with the experience acquired over the years of business in the field.

Staff + 200 employees • Turnover 35 million Euro • 70,000 square metres 4 production units in Italy • 1 logistics centre in Italy
1 ETA Next Research and Development centre • 1 production site in Romania
3 commercial branches in Europe (UK, France, Poland)
1 representative office in Russia • 40 countries around the world
90% of the product intended for foreign final markets • 40 years of business

The headquarters in Canzo (CO).
The ETA Group represents a safe and recognised point of reference for the global Enclosures market. In 2018 we celebrated our fortieth anniversary with production that has grown over the years and now offers products for four sectors:

1. **INDUSTRIAL AUTOMATION**

Sheet metal solutions with modular cabinets, compact and monobloc solutions, enclosures with wall or junction mount, lecterns, suspension systems for control interfaces, walkable cable ducting system and thermal management.

2. **HARSH ENVIRONMENTS**

For indoor and outdoor applications where a high degree of hygiene and/or resistance to chemical agents or environmental conditions is required, a wide range of solutions made of AISI304L or AISI316L, or in aluminium alloy with specific concepts for outdoor applications.

3. **LV ENERGY DISTRIBUTION**

The ENERPOWER range with Power Centers, Motor control centers and Secondary Distribution Cabinets.

4. **IT BUSINESS**

**ABACUS** - solutions with IP20 protection rating to offer the best performance even in the case of simplified applications (cabling or server applications).

**EXARO** - modular and flexible system of infrastructural solutions for the creation of advanced extensible architectures, from the single conditioned rack to the large data center, passing through micro and edge data center architectures.

**MULTIPLIES THE EXPERIENCE**

- **INDUSTRIAL AUTOMATION**
- **HARSH ENVIRONMENTS**
- **LV ENERGY DISTRIBUTION**
- **IT BUSINESS**
In order to meet the technical specifications of ENERPOWER products, both standard machines and special machines have been planned and purchased. The multifunctional heart of the department is the autonomous work island, which allows you to cut from coils, thread in 2D and 3D, bend and palletize in complete autonomy, thanks to the use of two robots, one of which is a Master in charge of handling and one Slave in charge of bending and palletizing.

Some benefits of the working island dedicated to sheet metal processing:
- greater process flexibility,
- simultaneous processing,
- high production speed,
- perfect synchronism,
- process autonomy.

An area of the production unit is dedicated to processing copper bars, with a dedicated punching and bending system: precision and cutting speed with automatic bar advancement and ease of use thanks to the bending process calculated by the numerical control. Storage area for flat sheet metal and dedicated coils, warehouse area for semi-finished products, assembly area and finished product testing complete the ENERPOWER department.
ALL-INCLUSIVE SERVICE
PROVIDING ADDED VALUE IS OUR STANDARD

ETA Next – inaugurated in 2017 in Canzo (CO) in Italy – is the ETA Research Centre, a centre totally dedicated to the study, design and prototyping of new solutions, with an eye to the most modern technologies, research of materials and, of course, to the development of projects dedicated to our Business Partners. A real Laboratory of Ideas and Solutions for ETA’s R&D Department, able to support the Customer in every design phase and test the components before their industrialisation, thanks to the latest generation systems dedicated only to testing and prototyping.

ETA Next also includes an entire area dedicated to Product Quality and Environmental Safety, to keep up to date on the subject of sector certifications and regulations. Furthermore, Laboratory instruments allow ETA to be able to respond to the precise and particular market demands.
THE CONFIGURATOR DEVELOPED BY ETA

A tool for the design and implementation of ENERPOWER solutions

Starting from your final application’s wiring diagram, our ETA Next Team / ENERPOWER Division will define the configuration of the ENERPOWER cabinet front, providing you with documentation, drawings and technical support during the entire order process.

And when you prefer to design the ENERPOWER system independently, you can request the possibility of installing the dedicated E DO configurator, thanks to which, with a few simple steps, you can generate drawings and bill of materials (BOM) for your solution.

To learn more about its potential, please consult the dedicated section on p. 30 and 31 or request a live demo with a sales representative!
ENERPOWER SYSTEM BENEFITS

NOT JUST A RANGE OF LV ELECTRICAL CABINETS, A COMBINATION OF DESIGN

**a single design**
for three new solutions designed for electricity distribution

**a single partner**
to manage energy, from power distribution to industrial and civil automation

**a single technical reference point**
for consultancy, design and construction

ENERPOWER system subjected to type tests provided for by the standard CEI EN 61439-1-2, with performance guaranteed by tests carried out under normal operating conditions.
a new and different cabinet
that incorporates ETA’s industrial tradition
that has been around for over 40 years,
integrating it with the most modern technologies

TECHNIQUE AND PRODUCT SOLUTION

Easy to design.
Compatibility with devices of the main brands/manufacturers on the market in the various versions available (fixed, removable, swappable)
Available with or without bar supports, copper/aluminium omnibus, anchor jacks, etc.

Quick to assemble or modify on-site.
Assisted by both technical support and E Do configurator software.
Flexibility and customisation for special executions.

Long service life in the plant, especially in harsh or extreme conditions.
Frame made of high yield point steel for higher mechanical resistance.
Simplified frame assembly thanks to the high standardisation, flexibility and modularity of the components.

Advanced construction features and materials.
Pre-threaded and pre-embossed holes for quick assembly.
Pre and post-sales assistance for impeccable service.
TECHNICAL SPECIFICATIONS

SHARED BY THE ENTIRE ENERPOWER RANGE

A SINGLE CONSTRUCTION FRAME

THE CATAPHORESIS PROCESS IN THE STANDARD PAINTING CYCLE

UPRIGHTS WITH ECO-COMPATIBLE MAGNELIS® COATING

COPPER OR ALUMINIUM BAR SYSTEMS

Components are STANDARDISED, ROBUST, FLEXIBLE, QUICK TO ASSEMBLE.

They are designed for efficiency and safety in all conditions of use.
HIGH MECHANICAL RESISTANCE AND SIMPLIFIED ASSEMBLY

A SINGLE CONSTRUCTION FRAME

Patented ETA Corner.
Frame made of high yield point steel for higher mechanical resistance.

Universal M6 drilling with 20 mm pitch, pre-threaded and pre-embossed along the whole the upright, for maximum speed, ease and construction speed.
A DOUBLE PROTECTION FOR UNIQUE PRODUCTS

THE CATAPHORESIS PROCESS

For the first time in the world, the cataphoresis process is applied to enclosure and electrical cabinet painting: the system is called E DUP, double protection.

The new E DUP – Double Layer Protection – process provides a cathodic electrophoresis paint primer with epoxy resin and a second finish with thermosetting epoxy polyester powders according to the ETA electrostatic standard cycle (standard ETA RAL7035 orange peel colour or full range of RAL colours available on request). This process – applied as standard to ALL ETA painted solutions – provides a primer with undisputed chemical and physical properties, which guarantees better product performance, in order to offer increasingly reliable, performing and adequate solutions for a wide variety of environments and applications. The high level of automation and process innovation have allowed the achievement of a result with high quality characteristics, allowing a reduction in the thickness of the finishing film and an elimination of waste in full compliance with environmental sustainability.

The marking that indicates ETA products with E DUP surface treatment
Upright frame with Magnelis® coating, self-sealing, eco-compatible and at least 3 times more resistant to corrosion compared to galvanized steel, even in more aggressive environments.

Magnelis® is a 0.45 to 6 mm thick surface coating whose specific composition (3% Mg and 3.5% Al) allows for the formation of a dense, stable and long-lasting protection layer, preserving the underlying steel even on deformed areas. In case of scratches or cuts the film containing magnesium migrates and covers the exposed part, preventing the formation of rust. In aggressive environments the particularly dense layer protects the metal blocking corrosion.

Saline mist tests demonstrate integrity after dozens of weeks not attainable with other surface treatments.
A SPECIFIC SOLUTION FOR EVERY PROJECT NEED
COPPER AND ALUMINIUM BAR SYSTEMS FOR POWER CENTERS, MCC AND

The system was created to be flexible and allow any design solution, the omnibus bars can always be designed and installed in accordance with engineering and construction site needs.

Copper and aluminium bar system with bar supports for all three types of cabinets. Junction easy between transport batches.

The **ENERPOWER** system was created to be flexible and allow any design solution, the omnibus bars can always be designed and installed in accordance with engineering and construction site needs.

Aluminium bar system to ensure the best value for money and assembly speed.
ETA can design and build bars with its customers and according to each specific need. The **ENERPOWER** system offers aluminium bars with extruded profile and with classic hammer head screws and surface treatments to guarantee nominal data.
Hinges and locks are made of metal, without any evidently more fragile and consumable plastic parts.

The holes are made by laser, therefore a high level result is guaranteed also with reference to painting and drilling can be made according to each customer’s drawing.
“Easy-lock” handle with a pleasant aesthetic appearance, pleasant to the touch and practical. Special locks are available on request.

Patches with plastic mask that matches the colours of the roof and plinth. The closing system insert is strictly made of metal.
TECHNICAL SPECIFICATIONS

Rated frequency
50 Hz

Working voltage
Ue 400 V~ or 690 V~

Rated insulation voltage
Ui 1000 V

Rated impulse-withstand voltage
Uimp 12 kV

Rated current
≤ 4000 A In

Admissible rated short-term current Icw/1s
Up to 100 kA

Admissible rated peak current Ipk
Up to 220 kA

Constructive forms of segregation
Up to 4b

Protection rating
Ip30 31 40 44 54
≤ 40°C
≤ 2,000 mt

W (mm) | H (mm) | D (mm)
-------|-------|-------
300    | 2000  | 800   | 1000 | 1200 | 1400 |
300    | 2200  | 800   | 1000 | 1200 | 1400 |
400    | 2000  | 800   | 1000 | 1200 | 1400 |
400    | 2200  | 800   | 1000 | 1200 | 1400 |
600    | 2000  | 800   | 1000 | 1200 | 1400 |
600    | 2200  | 800   | 1000 | 1200 | 1400 |
700    | 2000  | 800   | 1000 | 1200 | 1400 |
700    | 2200  | 800   | 1000 | 1200 | 1400 |
800    | 2000  | 800   | 1000 | 1200 | 1400 |
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1200   | 2000  | 800   | 1000 | 1200 | 1400 |
1200   | 2200  | 800   | 1000 | 1200 | 1400 |

Note: available plinth H = 100 mm or 200 mm
Power Center Frame.

Devices removable from the front, with continuous depth adjustment.

Easily accessible power connections from the back.

Functional unit for moulded-case switches.
Open switch segregated in form 4b.

Segregation in form 3b and 4b.

Insulating supports for omnibus copper bars (also available in aluminium up to 4000 A In).

Accessories for output jack anchoring.
MCC - MOTOR CONTROL CENTER
TECHNICAL SPECIFICATIONS

DIMENSIONS

SINGLE COLUMN

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Note: available plinth H = 100 mm or 200 mm

COLUMN WITH RISER

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Note: available plinth H = 100 mm or 200 mm

Rated frequency
- 50 Hz

Working voltage
- Ue 400 V~ or 690 V~

Rated insulation voltage
- Ui 1000 V

Rated impulse-withstand voltage
- Uimp 12 kV

Rated current
- ≤ 4000 A In

Admissible rated short-term current Icw/1s
- Up to 100 kA

Admissible rated peak current Ipk
- Up to 220 kA

Conductive forms of segregation
- Up to 4b

Protection rating
- Ip30 31 40 44 54

Normal working conditions
- Room T ≤ 40°C

Installation height
- ≤ 2,000 mt

Note: available plinth H = 100 mm or 200 mm
MCC frame with top bars.

MCC frame with back bars.

Cable compartment with settings for box connection.

Cable compartment lower area with pre-cut floor output.
Utility functional units.

Terminal board housing.

Top bar details.

Line arrival functional unit.
SECONDARY DISTRIBUTION CABINETS
TECHNICAL SPECIFICATIONS

Rated frequency
50 Hz

Working voltage
Ue 400 V~ or 690 V~

Rated insulation voltage
Ui 1000 V

Rated impulse-withstand voltage
Uimp 12 kV

Rated current
≤ 1600 A In

Admissible rated short-term current Icw/1s
Up to 65 kA

Admissible rated peak current Ipk
Up to 143 kA

Constructive forms of segregation
Up to 4b

Protection rating
Ip30 31 54

Normal working conditions room T
≤ 40°C

Installation height
≤ 2,000 mt

DIMENSIONS

SINGLE COLUMN

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Note: available plinth H = 100 mm or 200 mm

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Note: available plinth H = 100 mm or 200 mm
Depth 400/600 mm.

Connection between aluminium bars and copper jacks.

Aluminium bar system connection.

Cable riser with pre-cut bottom.
CERTIFICATIONS

PERFORMANCE GUARANTEED WITH TESTED AND CERTIFIED SOLUTIONS

Certificates “Assemblies and Cabinets - Bar system in ENERPOWER cabinet” issued by ACAE (Bergamo - Italy) on the basis of LOVAG reports:

Verification of Aluminium bar short-circuit withstand 40-60-70kA
LOVAG certificate no. 1618

Verification of Aluminium bar short-circuit withstand 50-80-100kA
LOVAG certificate no. 1619

Verification of Copper bar short-circuit withstand 100kA
LOVAG certificate no. 175

Verification of conditioned bar short-circuit withstand 100kA
LOVAG certificate no. 477

“ENERPOWER” test report released by I.N.R.I.M. Laboratory

Verification of 4000° overheating limits
Test report no. 14-0114-01

MATERIAL CONFORMITY CERTIFICATION

SYSTEM CERTIFICATIONS

IMQ
EUROPEAN COMMUNITY
IMQ
EN ISO IEC 80079-34

CSQ
ITALY / WORLD
IMQ
UNI EN ISO9001

ITALY WELDING INSTITUTE
UNI EN ISO15614-1
cert. No. LB0017/10

CSQ
ITALY / WORLD
IMQ
OHSAS 18001

WEBSITE, myETA RESERVED AREA, ETA SOCIAL MEDIA

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E DO is the configurator developed by ETA for the design, evaluation and budgeting of ENERPOWER solutions, available in stand-alone desktop version and simply installable via USB.

A tool available to the customer and to support our ETA Next / Division Team ENERPOWER to define the configuration of the ENERPOWER cabinet front and related bars, based on the final project or application.

In a few simple steps and with selections via drop-down menu, flag manual data entry or drag & drop, it is possible to develop a custom project (Power Center, MCC or secondary distribution cabinet):

1. Cabinet and system data entry (technical-dimensional specifications, voltages, current, etc.) with drawing specifications.

2. Project overview with relevant 2D drawing and the possibility of adding switches from the main brands in the sector (with relative adaptation to the cabinet cubicle and holes), omnibus bars, anchor jacks, etc. The graphic engine integrated in E DO allows for simple tool use: a plus that allows you to easily design an ENERPOWER carpentry and bar solution, integrating it with the components available on the market:
3. Download project views in .pdf format: cabinet front, bars, side views, top views, etc.

4. Download bill of materials (BOM) in .pdf format, with selected product code, description and quantity details.