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PROTECTA HUNGARY

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PROTECTA HUNGARY

PROTECTION & CONTROL

- PAST,
- PRESENT,
- FUTURE,
- CREDIBILITY

Company Profile

*Benjamin Franklin,**
inventor of the lightning rod,
made buildings safe.
We do the same with networks.

* Benjamin Franklin was later to be one of the drafters of the US Constitution.

TRADITION OF RESEARCH AND DEVELOPMENT

PROTECTA Ltd.
has more than half a century of experience in the production and development of electromechanical and solid state protective devices. The core staff of our company comes from the R&D engineers of the former state-owned Electric Power Research Institute.

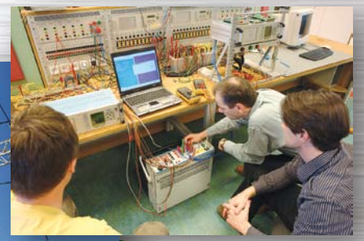
Our Company relies for its research and development on the most qualified experts in the field.

Today, we specialize primarily in the production of numerical fault protection relays and automatic controllers.

As a result of this highly qualified and experienced team, **development is PROTECTA's most important tradition.**

Scientific soundness – exacting technical standards

This credo is more than empty words. It has its roots in centuries of excellent Hungarian technical education that gave the world, among others, Nobel laureate Denes Gabor. In the 1920's the scientist, remembered as the father of holography, found a solution to detect travelling waves caused by lightning or switching, the so-called transient phenomena, which are also in the focus of our work. Our technical experts educated in the same vein vouch for quality.

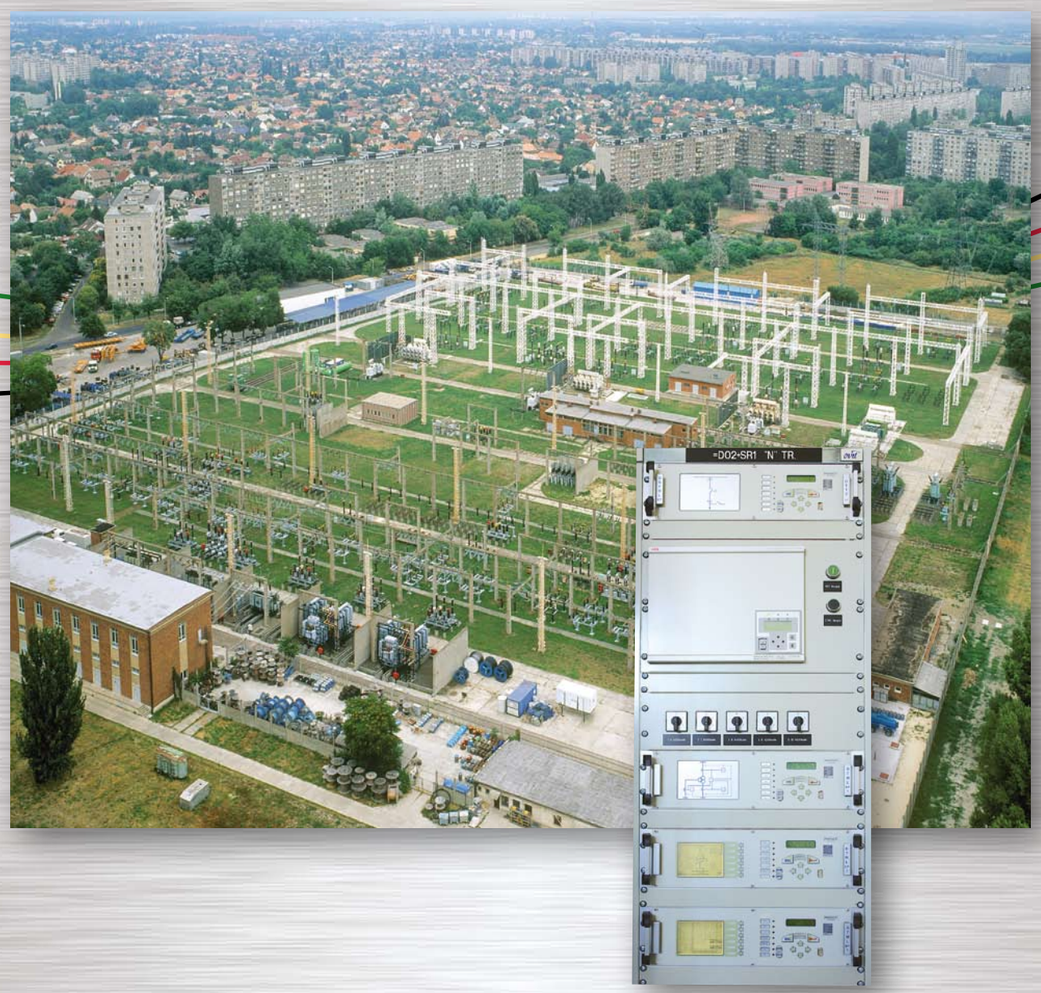


PROTECTA has over 60 years of history in the profession. The company was founded by its predecessor, the Electric Power Research Institute (VEIKI); VEIKI's predecessor, the research institute VILLENKI started the development of electric protective relays and automatic devices for networks and of the protective philosophy of the electric power system in 1949. The successive generations of devices always kept abreast with, and at times even overtook, the global technical vanguard. Our legal successor was among the first in the world to start the line production of protective devices with integrated elements.

Development milestones also representing a generation change:

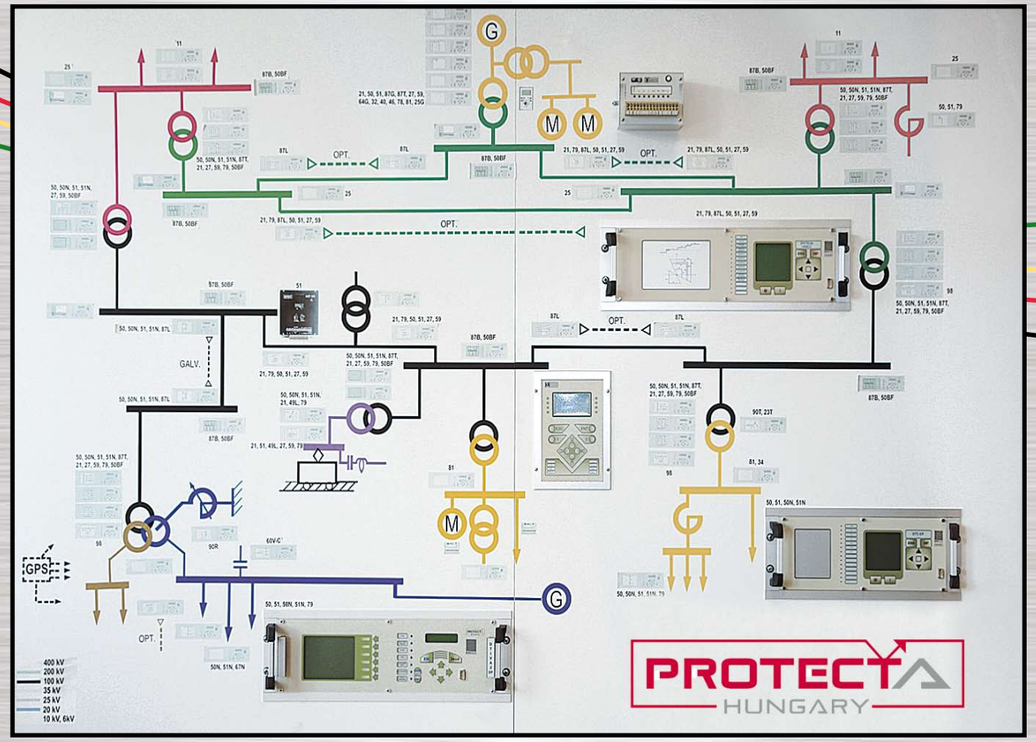
1949-1960 electromechanical devices;
1960-1970 transistor-based devices;
1971 - protection with analogue integrated circuits;
1990 - numerical (microprocessor-based) protective devices.

The Company started its operation on 1 January 1990. Following privatization, **PROTECTA** assumed an orbit of intensive growth, reflected in the parallel, dynamic increase of both revenues and profits. Today, the Company is fully owned by individuals who play a key role in the day-to-day operations of the firm.



Areas of application

- Transmission network (120 kV- 400 kV);
- Main distribution networks of regional distribution companies (10 kV- 120 kV);
- Generator-transformer units and auxiliary networks of power stations;
- Auxiliary networks of large industrial consumers (6 kV- 10 kV voltage);
- Privately owned smaller electricity distribution networks
  (not utilities, mostly for transportation systems).



Values, achievements, objectives

PROTECTA relies on three cornerstones: professional excellence, tailor-made solutions and superior quality.

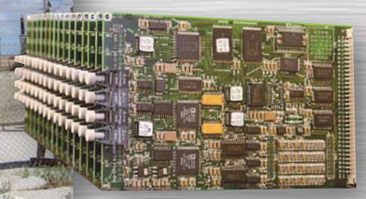
These values have allowed our market share in Hungary to exceed 60% in high-voltage applications and to be 90% in medium voltage distribution networks. Moreover, in recent years we have stepped up our exports. Throughout the year, our Company has exported its products to numerous countries in Europe, Africa and Asia. We ship our products either directly or as part of complete systems to Germany, Russia, Italy, Romania, Serbia, Greece, Cyprus, Lithuania, Iran, South Africa, etc. The number of our customers and the volume of orders fulfilled has been increasing year from year. At present, we have regular contacts with more than one hundred customers. We achieved this in a market where we compete with multinational firms such as ABB, Siemens or AREVA.

Developing products in-house for the whole range of protective devices continues to be a priority for us. Looking ahead, the Company is committed to raising awareness of its name in the global market relying on its existing values and achievements; one of the means to this end is to expand cooperation with investors and panel builders.

Partnership, a different kind of relationship

PROTECTA is committed to maintaining direct relations with end customers. For us, they are not only customers but PARTNERS in the full sense of the word.

Every product of Protecta Ltd. results from in-house development. This fact, together with the flexibility provided by the optimum size of our company, facilitates dynamic adaptation to demand, compliance with the most state-of-the-art requirements and the solution of specific tasks that may cause difficulties to our competitors.



Saldanha – South Africa

Our Company assists users by providing high-quality and continuous consultancy, product support and technical courses, even local training where required. This comprises direct assistance and consultancy by development engineers as well as participation in the commissioning process.

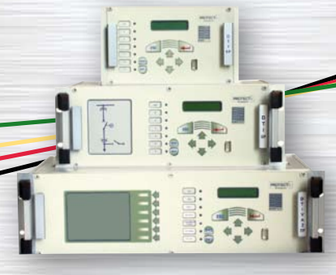
Devices need not be sent back to the manufacturer even in the event of subsequent extension. **PROTECTA** is also prepared for implementing modifications on the spot, at the site of the user.

We implement shipments, replacements and repairs of components at short notice.

At the cutting edge

The vast majority of **PROTECTA's** products consists in state-of-the-art stand-alone digital devices and complex protection systems mounted in cabinets. The **EuroProt** and **OmegaProt** digital device families were launched in 1996. Currently we have the most up-to-date digital devices available for every typical protection and automation function. The **SigmaProt** product family, offering more compact and efficient solutions, has been on the world market since 2002.

We set out to offer a comprehensive service to customers as well as full-range solutions. Therefore, PROTECTA Ltd. is more than a device manufacturer; we undertake to supply complete protection and control systems. Uniquely, alongside large corporations, we also offer solutions for all kinds of applications on MV and HV networks (6kV – 400kV). The ease of reconfiguration of hardware and firmware is evidence to the flexibility of our systems.



In addition to protective devices, we also manufacture substation automatic controllers for substations and special devices such as

- transformer voltage and tap changer controllers;
- transformer inrush current minimizers;
- Petersen coil controllers;
- high speed transfer devices for transformers and incoming feeders.

Protecta undertakes to incorporate devices into a system and to establish complete **PROTECTA** engineering workstations with remote access and easy event analysis.

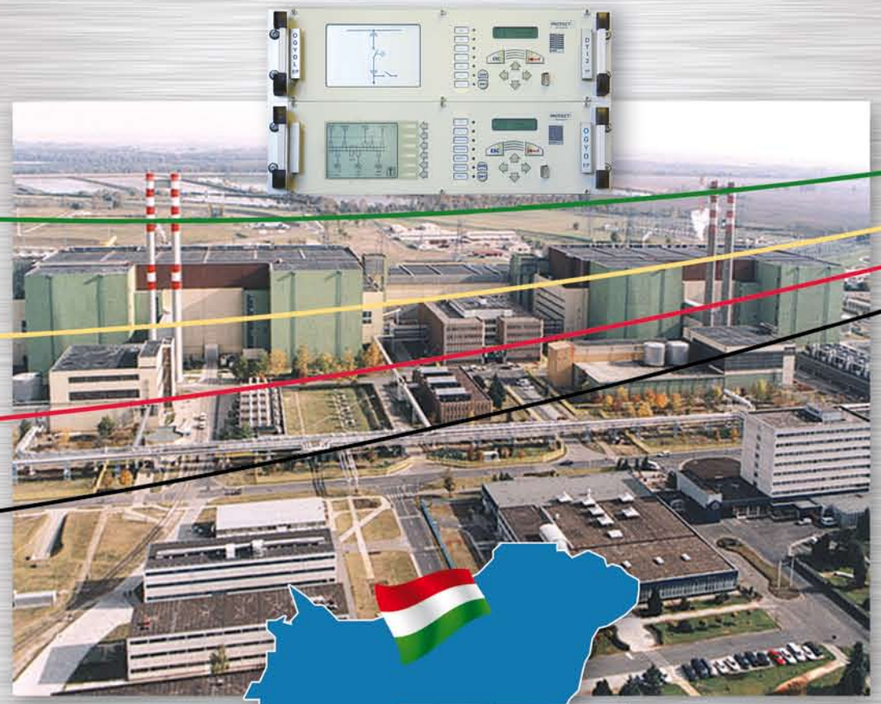
Our products have the IEC 61850 certification issued by KEMA.
In 2009, we launched the **„EuroProt+"** product line. When designing this device, we chose from the most advanced microprocessors and microcontrollers of the world intended for industrial applications; this allowed for extraordinary computing and processing capacities. Both the hardware and firmware design of the device is based on the IEC 61850 platform. As a result, **„EuroProt+"** stands comparison with the cutting-edge protection devices available in the global marketplace.

References

PROTECTA is a European company but it also has a presence on other continents. Our list of references becomes more extensive year from year. We maintain close relationships with our partners in the European region. These firms are key players in the energy sector: Hungarian National Grid (MVM), E.ON Group, EDF, ENEL. We are proud to have among our customers nuclear power stations, which impose special security demands, both in Hungary and in the Russian Federation.

During the last 5 years we have sold the following quantities from our key products:

- Bus bar protection (optically coupled, distributed type) for 100kV – 400kV: **97 pcs**
- Distance protection for 100kV – 400kV: **1260 pcs**
- Distance protection for 35kV: **131 pcs**
- Overcurrent protection: **4500 pcs**



Hungary

Russia

Italy

India

South Africa

Cyprus