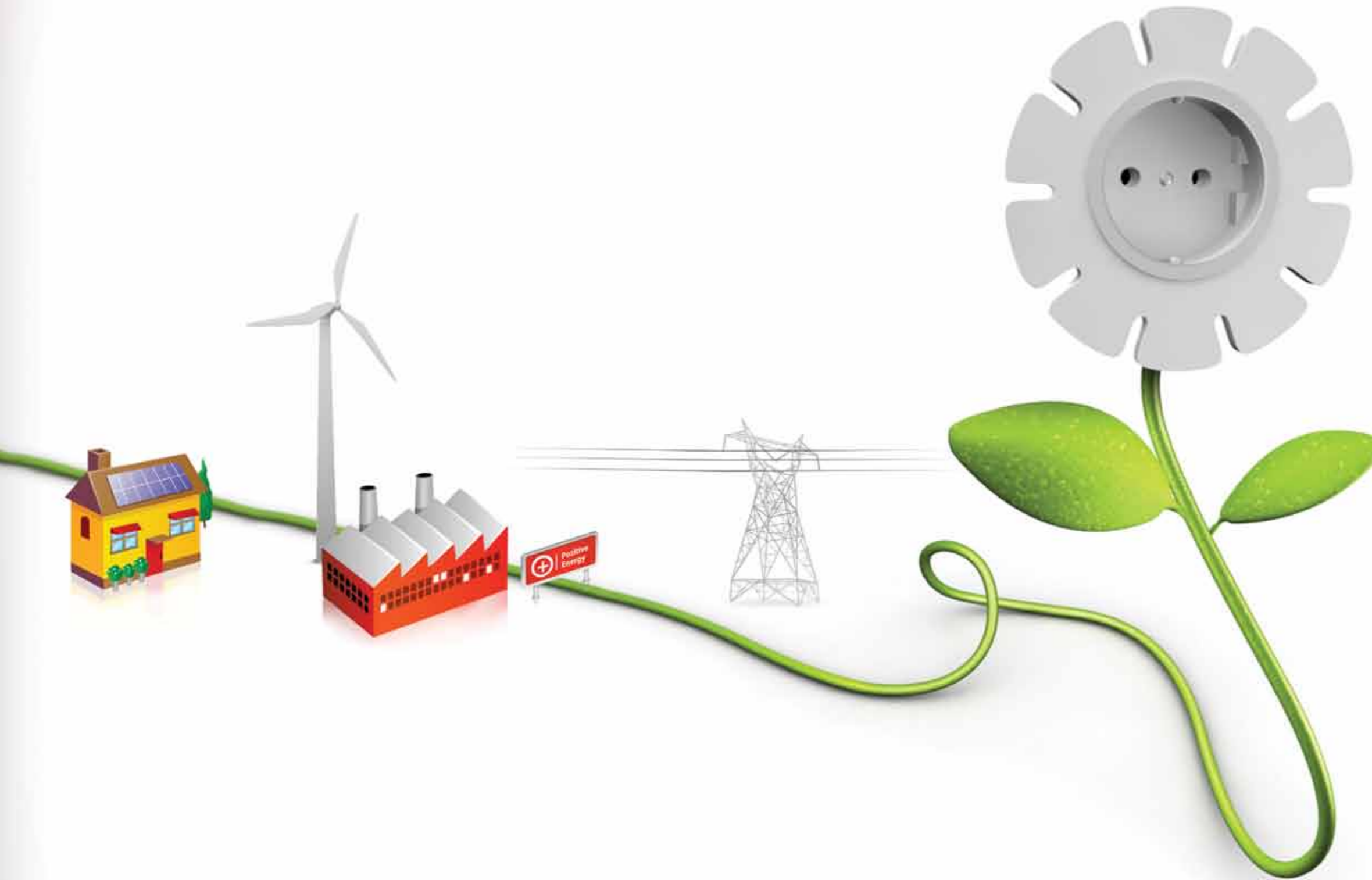




CORPORATE
PRESENTATION CATALOG



KONTROLMATIK[®]



KONTROLMATİK, gets your energy under control. By means of the automatic control system which we use for producing, distributing and transferring the energy, not only you are able to use your energy efficiently, but also, you are able to help to protect the nature of the world.

One of the leader engineering company, Kontrolmatik, has achieved lots of projects of domestic issues besides abroad in a short time with it's energetic, experienced and dynamic labors

Kontrolmatik domestically manufactures it's tools and panels which are required for the represented solutions from kontrolmatik and it presents high quality solutions through it's turn-key service politics.

Kontrolmatik, which develops it's solutions and systems with regard to recent technological developments, emphatically makes progress on the purpose of being an international engineering company.

It's principle aim is not to sell the products, in contrast, to present technological solutions.



■ Energy Efficiency Applications,

■ Projects of Efficiency Development,

■ Controlling the energy

- Network- generator synchronization
- Billing of energy- reading of automatic meter
- Load shedding/load up/load sharing
- Controlling of switchyard
- Hydroelectric power plant automation,

■ Building Management Systems

■ Automatic Control Systems for HVAC

■ Scada Systems

- Controlling of water treatment
- Automation of refinement installation
- Heat centrals/ boiler rooms
- RTU basement systems

■ Premier Circuit Frequency Control,

■ Railway Systems and Tunnel (ECS/SIMS),

■ Test and Measurement Systems

■ MCC Panel Solutions,

■ Distribution Panel Solutions (from Form-2A to Form-4B).

ENERGY EFFICIENCY

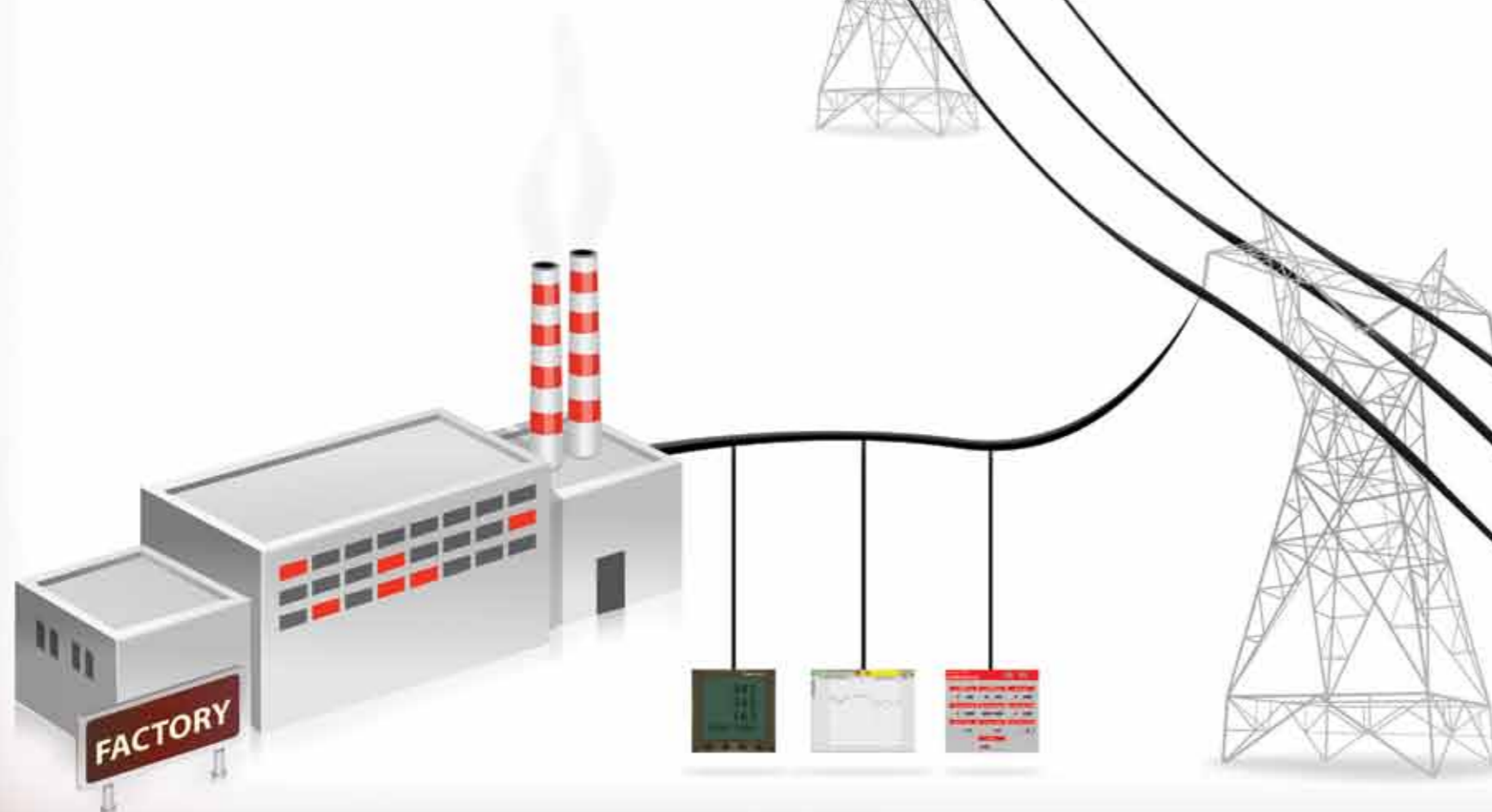
Energy efficiency is to reduce the consumption of the amount of the energy without reducing the quantity of the energy production and the quality of it, and what is more, not by obstructing the economic rehabilitation and social welfare.

If we focus on the details, energy efficiency is to total of preventing the loss of energy of gas, steam, heat, air and electric, recycling variety of waste products or by means of technology, without reducing production to decrease in demand of energy, more efficient energy resources, and developed industrial process and recycling energy.

We can obtain energy conservation at **%40** within buildings and houses, **%30** within industry and **%18** within transportation.

Energy efficiency is not a preference, it is an obligation. The fastest, the cheapest and the clearest way to reduce energy consumption and to adapt the greenhouse gas emission to the requirements of Kyoto are energy efficiency.

Kontrolmatik helps you to develop by energy conservation and presents comprehensive solutions with regard to housing, building energy and infrastructure markets in addition to data and network markets.



CONTROL OF ENERGY



Companies need qualified labor force, a huge cost of an investment and a high technology to cover the increase in demand. In this point, automation is indispensable. In spite of the first investment cost, companies change their old and slow systems to technologic, fast, and reliable automation systems.

Kontrolmatik sets up key-turn systems with regard to **energy scada systems, synchronization systems, energy billing/automatic reader of the meter, instantaneous load shedding/load up/load sharing.**

Energy automation systems in general enable to monitor and control power distribution units, generators, AG panels and contactor switch, and OG breakers in installations and what is more, to monitor the current, the voltage, the power, the power factor, the activated and inactivated energy and the protection relays by using the energy analyzers.

In energy automation systems, equipments at the below are monitored and controlled

- PLC/RTU unit's,
- The circuit breakers,
- The energy analyzers,
- The analyzers of energy quality,
- Reactive power control relays,
- Protection relays,
- Transducers
- PLC/RTU automation panels,
- The electric meters

In energy automation systems;

- A. **OG** and **AG** distribution systems are controlled and monitored in a unique center.
- B. Circuit breaker and motorized switches are maneuvered automatically and manually.
- C. Devices such as protection relays, energy analyzers, UPS and so on, which spread the all fields are read with ms quality by using proper communication protocol.
- D. The data which follow up instantaneously gives opportunity of retroactive scrutiny by recorded
- E. To enable energy conservation, it gives the information to personnel about the consumption points.

BUILDING MANAGEMENT SYSTEMS (BMS)

BMS contains the software and hardware solutions which are designed to automate the electro-mechanic systems in new, high modern structures and current structures.

The aim of the building management systems is to centralize the monitoring, management and running the devices in the structure. For people in structure, to make safe and comfortable the structure with less labor force and energy, the structure automation systems are requirement.

Kontrolmatik represents building management systems by using turn-key high technology. We have comprehensive solutions from the highest field equipments to software in our systems. By using the concept of "green building" of the company Innotech, which of we are the distributor, we are able to organize the systems compatible with LEED.

The field equipments:

- Servo motors, rational valves;
- Temperature, moisture, pressure, and air quality sensors
- Damper motors, thermostats;
- Calorimeters, energy analyzers, meters


Control equipments:


- **(DDC)** Direct Digital Controller
- **(PLC)** Programmable Logic Controller;
- **(PAC)** Programmable Automation Controller;
- **(I/O)** Input/Output Modulus;
- Communication Modulus;


Monitoring and Management Equipments;


- Human-Machine Interfaces **(HMI)**;
- Industrial Computers
- BMS/SCADA Software





 Effective car parking control

 Monitoring and management of energy consumption


 the opportunity of central or remote access to structure systems


 Optimization of water consumption


 Gas-oil automation

 computer control of repeated operations/ keeping the previous records

 Control of heating and refrigeration

 Knowledge acquisition about the details of structure systems.

 Air conditioning control

 Energy automation

SCADA SYSTEMS



SCADA systems (supervisory control and data acquisition) are determined as controllable and supervised systems which are constituted by computers, communication devices, sensing elements and other devices. In most general, the scada systems are divided into scada of energy and scada of process.

The scada systems which are used for monitoring, controlling and data acquisition for the processes, by means of the devices being used for control of the process in the installation (RTU, PLC, PAC, DCS i.e.) set up a substructure to control and follow up the production in the installation. The aim is to install the structure for more qualified product and more production with low cost. For the highest efficiency of the installations, companies need to have the command of the whole installation and production knowledge.

Turkey system integrator of the national instruments, the SCADA systems, are used for diverse fields such as hydroelectric, nuclear power plant, natural gas production, implementation of gas, oil, chemical matter, pump, valves, flow measurement equipments of water pipe line, control of electric transferring lines which are long as a kilometer and balance instantaneous change in power in the lines.

Our company installs turn-key, modern, and high technologic systems. Some of the main sectors we work on:

- Water treatment stations,
- Clear water- wasted water refinery installations,
- Pump stations,
- Railway systems and tunnels,
- Heat centrals,
- Power plant,
- Energy transferring lines
- Industrial production companies.

THE AUTOMATIC TESTS AND THE MEASUREMENT SYSTEMS



Kontrolmatik, with experienced engineers and the high technologic software of National Instruments provides test and measurement services with regard to the needs of Research-Development and Production- Development, manufacturing, and telecommunication sectors, moreover; installs turn-key automatic test and measurement platforms.

Test section implements the test and measurement services in a short time by means of sensor of signal acquisition and data acquisition devices with hundreds of canal and by reading the results, it improves them when it is necessary.

Services which are implemented by our company;

- GPS receptor tests,
- RF tests,
- RFID tests,
- WiMAX/WLAN/ZigBee tests,
- Digital and analog video tests,
- Audio tests,
- Semiconductor tests,
- Microelectromechanical (MEMS) Test System (accelerometer, gyroscope, microphone, hardware-in-the-loop (HIL) tests,
- FPGA based real time tests,
- Wireless sensor network,
- Data acquisition systems from a distance,
- Quivering & vibration measurement and tests,
- Harmonic measurement.

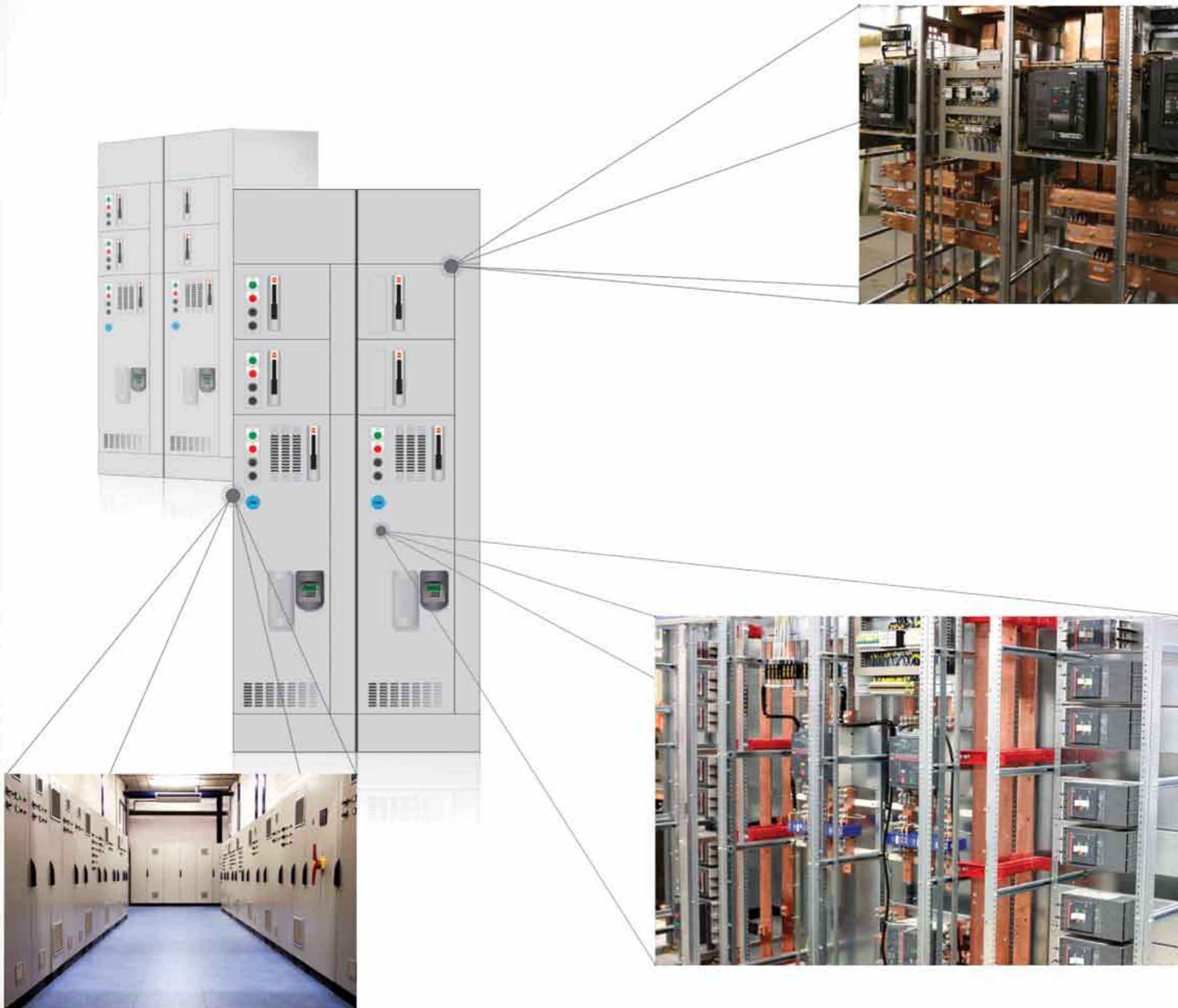
MCC PANELS

In the projects we implement panels are supplementary elements, in addition, it is a significant part of the system. In all systems we set up, we implement type tested distributed panels including form 4-B, MMC panels (motor command panels), and motor driver panels to 400KW.

We separate between AG distribution panels and MMC panels adapted to IEC 60439-1 standard and functional parts of panel by developing the installation safe.

For special implementation, we implement IP66 protection class panels and adapted to American standard, UL50 certificated panels.

We use bara systems designed for power distribution systems and especially MCC panels.



OUR SOLUTION PARTNER



INNOTECH www.innotech.com.au

In Turkey we are the distributor of Innotech which is one of the leader company related to building management systems.



NATIONAL INSTRUMENTS www.ni.com

The most important technology company, National Instruments, specialize on test, measurement, control, and artificial intelligence. Our company is the system integrator of National Instrument in Turkey.



ADVANTECH www.advantech.com

Advantech industrial is the greatest manufacturer of production of PC, signal collection, PAC, and industrial panel PC. Kontrolmatik is the system integrator of Advantech in Turkey.



ABB www.abb.com

In turkey we are the system integrator of ABB which is one of the leader engineering and manufacturing companies related to electric energy.



SCHNEIDER ELECTRIC www.schneider-electric.com

In Turkey, we are the system integrator of Schneider Electric which is one of the leader companies in the world related to manufacturing switchyard devices.



SIEMENS www.siemens.com

We are the dealer of HVAC products of Siemens which is one of the leader technology companies in the world.



RITTAL www.rittal.com

In Turkey, we work as the system integrator of Rittal which the greatest industrial company of the world.



İstoç Ticaret Merkezi 32. Ada No:35-37 Bağcılar / İstanbul
T: +90 212 659 24 41 | F: +90 212 659 24 81
www.kontrolmatik.com