



Watt White!..

Board of Directors

Fabrizio Carnelli

Ahmet Güvenman

Giuseppe Moggi



Gözde Güvenman

Orietta Pagliai

AKTIF group of companies are dedicated to providing high value added products at the highest level to all its customers in terms of quality, service, cost and delivery.

Our goal is to meet the expectations, demands and needs of our customers by continuously identifying, auditing and providing them in order to improve total customer satisfaction.

All of our stakeholders, especially our customers are of great importance for us and we put them at the center of our business.

The success of the Aktif group of companies is based on the six fundamental principles that constitute the substructure of our Vision, as well as its commitment to the Aktif values created by a wide range of customer satisfaction practices; Quality, Cost, Delivery Time, Security, Environment and Human Development.

Within these basic principles, our aim is to continuously improve our capabilities, to increase our product range and to offer our customers the best service at national and international levels.

Our employees are our basic building blocks for achieving this goal that have been pursued for a long time under the guidance of sustainable business practices and best practices of the business line in which we are working, using the latest technologies.

A handwritten signature in black ink, reading "A. Güvenman". The signature is written in a cursive, flowing style with a large initial "A".

Values

Vision

Energy is one of the basic requirements for worldwide economic development but the greenhouse gases effect depends on great extent on how energy is produced.

as AKTIF Group, do endorse Global compact and sustainable development as one of the pillars of our business approach.



Mission

We are doing our best in order to contribute our stakeholders' success and to improve our footprint in terms of technology, price, quality, environment and delivery performances.

Our mission is to bring the most competitive products and services to enable simpler and more effective power and energy transfer to all our customers by offering them widest possible solutions and applications.



Values

AKTIF values are the group commitment to our customers, our employees, our shareholders and all of the communities at which we play role directly or indirectly.

Our Values are;

- Customer satisfaction
- Loyalty
- Profitability
- Liability
- Totality
- Equity
- Corporation



Service Continuity

The service continuity means efficiency of power and consequently the profitability of the business.

Our products are designed and manufactured in order to ensure energy sustainability and provide the best service availability.



Health and Safety

The Health and Safety are the main concerns in all of our products. Design, Interlock logics and documentation of our products are implemented, manufactured and tested in order to reach up the highest safety level.

Furthermore, services and site works are done according to human safety rules by taking into account the hazardous impacts of electricity.



Technology

The most important activities of Aktif is R&D and increasing the Employee quality which the investment amount of these activities are more than average. All mechanical projects are designed by 3D-CAD platforms.

Power flow, test and quality works are calculated by worldwide accepted simulation software and ActWin software as well as developing software for different platforms.



Group Companies

Aktif Elektroteknik A.Ş.

Aktif Elektroteknik was established in 1981 manufacturing Switchgears, Compact Substations and Mobile Substations.

Friem S.p.A (Italy) became significant shareholder in 2009. Aktif Elektroteknik has been managed by the synergy of internationally experienced group companies.

Aktif Elektroteknik as being the first company manufactured MV Switchgears and Mobile Substations in Turkey, operates with its more than 100 employees in 5000 m² closed production area in Ankara.

Company operates with its manufacturing experience, experienced R&D team, modernized machinery line, ever increasing know-how, “Lean Manufacturing system”, high quality products type tested by the leading accredited European laboratories and certified quality management.

Aktif Mühendislik A.Ş.

Aktif Mühendislik was established in 1996 operating in the field of Measurement, Protection and Energy Quality.

Aktif Mühendislik is located in Istanbul residing at 2200 m² management building with more than 50 employees.

Since its foundation, “Aktif Mühendislik” has been providing high quality engineering services in the energy sector with its high quality measurement and protection devices and systems, energy saving and cost analysis.

Aktif Mühendislik has been providing custom and standard solutions for its exclusive customers with its more than 20 years of experiences and practices throughout with domestic and international references that it has gained so far along the way.

Aktif Güç Elemanları A.Ş.

Aktif Güç Elemanları, was established in 2009 at Sakarya for serving in low and high voltage industrial power load’s sector in the name of “Elektres”.

The company started its production with braking resistances, starting resistors and board heaters. Later it has begun producing Load banks, Neutral Grounding Resistors, Filter Resistors, Charge and Discharge Resistors, that proved to be one of the most important players in the industry with its complete product range and design and quality.

When the company reached its fifth year, it has completed the whole resistor portfolio and manufactured the state-of-art load banks that later become the market standard.

Aktif Group acquired Elektres in 2018 and protect the Elektres brand. Same year, it has started R&D for producing all other power components besides the resistors.



Aktif Power Quality A.Ş.

Aktif Kompanasyon ve Harmonik Filtre Sistemleri A.Ş., established in 1996 within the scope of Aktif Mühendislik, provides high level engineering services together with power quality product and system solutions at home and abroad..

Over 20 years experience of founding and core engineer staff has over 4000 measurement and reporting services, over 1500 field applications and technical solutions.

Aktif Kompanasyon ve Harmonik Filtre Sistemleri A.Ş. has continued its research and production infrastructure studies with its internal resources and engineering know-how in order to adapt more to the innovations in developing and growing markets .

Aktif Kompanasyon ve Harmonik Filtre Sistemleri A.Ş., continues its high quality service and engineering activities for power quality and applications in Aktif Group company.



Üçgenler Enerji A.Ş.

Ucgenler Inc. has been established on 220.000 m2 field to generate electricity from the Solar power. Ucgenler is an unlicensed type of solar power plant generating electricity according to Turkish Ministry of Energy regulation, designed and built to operate for 25 years life time with under purchasing electricity warranty of government during 10 years.

Power transformation and distribution part of the solar power plant was built up by Solar Substation Package of Aktif and Friem. Plant currently has 11.5 MWp power capacity which is limited with 10MW demand power and 4MW part of the plant belongs to Ucgenler Inc. who is a member of Aktif Group.

Ucgenler is designed to run with %87.5 efficiency to provide 20 GWh annual energy and has been running with 3% higher performance compared to the initial energy production calculations.



Friem S.p.A

With continuous investments in research and development, FRIEM is leader in Diode, Thyristor or IGBT type High Power Converters, applying the most advanced technologies and shareholder of Aktif Elektrotechnik since 2009.

Founded in 1950 to design and manufacture High Power Converters, FRIEM continued to develop its know-how in energy conversion for Industrial, Traction and Renewable Energies applications.

In 1956 FRIEM produced and installed its first 50kA Rectifier Unit for application in Chlor-Alkali industry. At the absolute forefront in technology, in the early 60's FRIEM was able to manufacture units up to 110kA and to design the first high current Thyristor Rectifier. Service continuity required by the Electrochemical Industry oriented design towards absolute reliability: quality, safety, latest international standards have always been the base for the design of our Equipment.

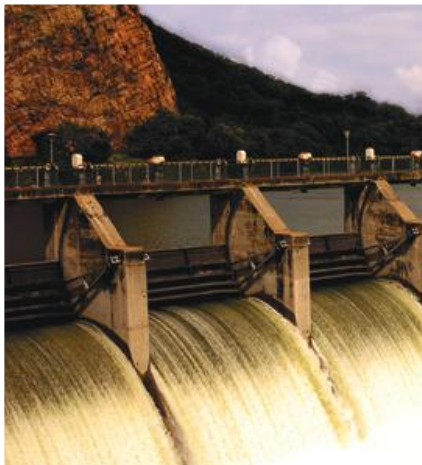




T&D

Within the context of Energy Systems, we are serving high quality products and services about electrical protection, measuring, management and switching in the field of Power Generation, Transmission, and Distribution Plants and Industrial Zones.

Also we are providing all-inclusive solutions to increase up the power quality in those facilities.



Renewable Energy

Due to the decrease in the amount of the fossil energy and increase in the greenhouse gas emission levels threatening our environment brings up a demand for new and renewable sources.

Turkey covers its energy demand from petroleum and natural gas resources and they are mostly being imported from foreign countries.

Aktif is taking its part by providing full scope of Solar Energy Systems as a premium MV product manufacturer.



Industry

Within the framework of industrial electrical systems, we are offering the most preferable and dedicated solutions for the electrical switching, measurement, protection, management and power quality in all industrial facilities.

We are offering products, system and services blended with deep experiences of strong engineering staff with our deep experience of for 35 years combined with high quality know-how information.





Smart Buildings

In all smart buildings and shopping malls, the whole control system is required to be automatic. Aktif Group, offers solutions in “Energy Billing”, “Energy Management” and “Energy Automation” systems since 1996.

Our software development department designs and develops tailor-made and code independent software for smart buildings.



Hospital

Within our scope of hospital solutions, we are producing isolated power systems which are used in hospital electrical network, especially in “Group 2” rooms (operating theatres, intensive care rooms...)

We are also producing operator control panels that manages the data of automation and lighting control systems of an operating room while supplying also the related commissioning services about these panels.



Transportation

We are supplying DC Switchgears, Traction Rectifiers, Medium Voltage Switchgears, Traction Transformers, Disconnect Switches and Compensation Panels for Railway applications.

In addition we are providing power quality, measurement and protection equipment in ship industry and airports.



Metal Clad Switchgears

SMC and SNC series switchgears are LSC-2B, AFLR, PM and manufactured up to 36kV, 4000A, 40kA/3s and designed to be used in installations requiring high level of safety and energy continuity.

High level of operating and facility safety features are also ensured with mechanical/electrical interlocks and pressure relief channel.

SMC & SNC series switchgears can be produced with seismic zone, tropical zone and 5 years guarantee option for special applications.



Metal Enclosed Switchgears

SME series switchgears are LSC-2A, AFL, PI and manufactured up to 36kV, 1250A, 25kA/1s. SME series switchgears are capable of flexible extension and easy installation with modular design.

SME series metal enclosed switchgears offer reliable and affordable solutions for distribution substations, small power plants, industrial facilities and building applications in compliance with project requirements.

SME series switchgears can be produced with seismic zone, tropical zone and 5 years guarantee options for special applications.



Switching Equipment

Aktif SRS Air Insulated Rotary Disconnecter Switches and SES Earthing Switches are manufactured according to IEC 62271-102 standard so as to use in our cubicles and cubicle manufacturers.

SES Earthing Switches are used for earthing the high voltage systems in safety and it can operate with all type of disconnecter mechanism.

SRS type Switches are manufactured as 3 poles and 2 positions, together with SES type earthing switches, it can be used as 3 poles and 3 positions.



Mobile Substations

SMS series mobile substations include transformer, primary and secondary substations on mobile platforms in order to provide energy for temporary or additional energy demands of facilities.

SMS series mobile substations are manufactured for applications like temporary power demands, mining applications, military camps, industrial facilities, emergency power demands and additional power requests. Up to 245 kv.



Compact Substations

SCK series Steel Sheet Kiosks generate solution for MV Electrical substations, MV/LV Electrical substations and energy distribution systems with process control to be placed in the heavy environment conditions. SCK series steel sheet kiosks are also designed to be used for exproof systems.

Aktif SCK-2 Compact Substations are produced in compliance with Zone 2 area conditions for Oil & Gas applications.



Prefabricated Substations

Aktif SMK and SPK monoblock and prefabricated concrete compact substations are transformer and distribution substation manufactured up to 1600 kVA / 2500 kVA respectively.

Aktif concrete substations are manufactured for outdoor applications like power stations, industrial facilities, energy manufacturing plants and transportation solutions. Moreover, SMK gives opportunity for special usages like generator and compensation systems, control and signalization centers.



Neutral Grounding Resistors

“Neutral grounding (earthing) resistors” are connected to the neutral points of power transformers and generators on LV and MV distribution networks to be used for limiting, measuring and monitoring phase to ground fault current, are manufactured with high technology.

- Neutral Grounding Resistor
- Generator Neutral Resistor
- Generator Neutral Cubicle
- High-Resistance Neutral Grounding System



Filter Resistors

“Harmonic filter” and “damping resistors” manufactured by Aktif remove the harmonics from the system in a safe and controlled manner. “Discharge resistors” and “RC filters” prevent transient and dangerous discharges caused by inductive loads including capacitors, power transformers and large reactors. By the help of these resistors, it is ensured that the power quality is increased, the enterprises are more safe, economical and sustainable.

- Harmonic Filter Resistor
- Damping Resistor
- RC Snubber Filters



Current Limiting Resistors

“Current limiting resistors” are used to adjust the current to the desired value at power laboratories and some special applications such as switching on large power transformers.

Aktif manufactures all kind of current limiting resistors up to 36 kV rated voltage according to customer requirements.



Load Banks

“Load banks” are used to perform the tests of generators, UPS, voltage regulators, power transformers, alternators on site data centers and test laboratories and also to ensure safely operation of generators to supply as dummy load.

Aktif manufactures all kind of load banks with required R, L, C characteristics, AC / DC electrical specifications with mobility option available.

The control parts of our Load Banks are designed and manufactured with manual, HMI and/or automatic options depending on the requested measuring methods.



Motor & Braking Resistors

“Motor control resistors” are used in industry to start rotor-wound, squirrel-cage and induction motors to limit the high starting currents.

“Braking resistors” are used to ensure fast stopping, deceleration and control of AC and DC electric motors that are controlled by variable-frequency drives.

Aktif manufactures aluminum-case, spring-wound, edge-wound and grid type resistors thus submitting the best solution considering field conditions, application and power.



Power Resistors

Traction Resistors

“Crowbar resistors” are used to protect the outputs of power sources against the transient and long-time overvoltages.

“Line test resistors” are used for detecting any failure on catenary.

“Traction braking resistors” are used to absorb the regenerative power caused by breaking.

“Charging & discharging resistors” are used to charge and discharge dc capacitors.

“Filter resistors” improve the quality of power and “Damping resistors” are used to prevent any damage on electronic components by limiting any current and voltage peaks.



LV Capacitor & Filter Banks

Aktif low voltage capacitor banks are designed, manufactured and adapted to the specific needs of each client. There are thousands of references around the world. It has modular and compact design optimized for easy future expansion of the system. It is suitable for indoor and outdoor installations.

It is a packaged factory assembled reactive compensation system with modular switched capacitor steps, which will automatically compensate an individual load or the network to maintain a preset level of power factor.



HV Capacitor & Filter Banks

High voltage capacitor banks are designed, manufactured and adapted to the specific needs of each client. A high quality intelligent design brings advantages to your project from the start. It has modular and compact design optimized for easy future expansion of the system. It is suitable for indoor and outdoor installations.

High voltage capacitor banks are a packaged factory assembled reactive compensation systems with modular fixed or switched capacitor steps, which will automatically compensate an individual load or a network to maintain preset level of power factor.



Static Contactors

Asset Thymod Static Electronic Switch is the electronic switching unit that allows switching the capacitor banks without any discharge delay in the plants and also switching the capacitor banks according to load variation cannot be possible.

Asset Thymod Static Electronic Switch is developed according to the related IEC standards to balance the reactive power and to solve the energy quality problems in complex industrial plants where used devices that are sensitive to voltage changes such as PLCs, industrial computers, industrial robots, welding machines.



HV Filter & Shunt Reactors

Asset High Voltage Reactors are designed and manufactured for Power Factor Correction and all Power Line Carrier and Electricity Network Systems.

These reactors are presents for all users, suitable safety, long life and high technical specifications at all panel types and all open type industrial applications.

Type of use of reactors, Shunt Inductive Reactive Load Reactors, Serial Current Limiting or Damping Reactors, DC or AC Line reactors, Harmonic Filter Reactors, Neutral Grounding Reactors etc. on the power systems.

All Asset Air Core and Iron Core High Voltage Reactors are presents in safety working on all Power Line Carrier and Electricity Network System.



LV & HV Capacitors

Asset Low Voltage and High voltage capacitors are designed and manufactured for Power Factor Correction systems and conventional compensation systems. These capacitors are presents for all users, suitable safety, long life and high technical specifications at all panel types and all industrial applications.

Asset Low Voltage Capacitors are presents solutions at 50 Hz and 60 Hz network frequency from 120V to 1000 Volt.

Asset High Voltage Capacitors are presents solutions at 50 Hz and 60 Hz network frequency from 1000V to 19000 Volt.



LV Filter & Shunt Reactors

Asset Low Voltage Harmonic Filter and Shunt Reactors are designed and manufactured for Power Factor Correction systems and compensation systems. These reactors are presents for all users, suitable safety, long life and high technical specifications at all panel types and all industrial applications for PFC and compensation systems.

Asset Shunt Reactors are used in order to compensate capacitive reactive power generated by long and lightly transmission lines.

Asset Harmonic Filter Reactors are used in the high level of harmonic distortion in facilities for compensating of reactive power and protecting of capacitors.



Operating Control Panels

Asset OCP Series Operating Control Panels are a contemporary and reliable device designed for maintaining the most comfortable environment possible both for patient and the surgery team and most suitable working conditions required in the surgery room.

Asset OCP Series Operating Control Panels performing all electrical controls can be manually operated on the screens. Another feature is to perform all data exchange required for automation, and solely undertake all automation tasks even in non-central automated environments.



Isolated Power Panels

Isolated power panels are used in group 2 rooms in medical locations and they consist of auxiliary devices and test combinations such as isolating transformer, insulation monitoring device, fault location system, changeover module and remote alarm indicators.

Isolation level is monitored continuously in isolated power systems and converts the fault to alarm signal by detecting at adjustable level provided that it is not less than 50 k Ω .



Isolating Transformers

Medical isolating transformers are designed compatible with IEC 60364-7-710 standards for power supply of single phase IT systems and produced in accordance with EN 61558-2-15 standards.

Medical isolating transformers designed at 6 different power stages between 3,15...10 kVA have high excessive load capacities.



Energy Management

Rapid development in technology, increases the need to energy and makes power quality crucial and hard to achieve; especially after semi-conductor usage increased dramatically.

ActWin Smart energy management and smart metering software is used from the energy production points to distribution and consumption and enables monitoring of energy consumption and power quality by gathering, reporting, analysing and billing features.



Measurement Devices

The first step of the efficiency and continuity is to monitoring the energy consumption and power quality. Aktif is the distributor of Iskraemeco energy meters, Bender energy analyzers and Bender power quality recorders in Turkey.

Besides the distributorships, Aktif also supplies energy analyzers and rail mounted meters with its brand name Asset.



Protection Relays

It is required that protection equipment must be used on energy lines for protection against line problems like leakage and interruptions.

At this equipment selection, wide adjustable time and measurement parameter scale is the most important thing after the reliability. Also variety of toroids to be used provides easy usage. With Aktif Mühendislik products, these needs can be covered completely.



Cast Resin Transformers

TESAR has been designing and manufacturing Cast Resin Transformers for more than 35 years. TESAR transformers are designed and manufactured in conformity to E2 C2 F1 classes in accordance with IEC 60076-11 standards. TESAR manufactured more than 45.000 transformers for more than 45.000.000 kVA, during 35 years.

The range of production of distribution TESAR transformers covers power from 100 up to 3150 kVA and primary voltage up to 36 kV. Also, TESAR customized transformers covers power up to 20 MVA and primary voltage up to 52 kV.



Tesar

DC Switchgears & Controlgears

DC Line Feeder Cubicles are designed for Railway application with the switching capacity of 750 V/1500 V/3000 Vdc up to 10.000 A. In the mass production the DC Switchgears are conforming the IEC standards as well as conforming to other standards if required.

DC switchgears which include HSCB continue to operate to operation in three positions (service/test/withdrawn). As additionally Switchgears has the Interlocking system against the wrong operation.



COET

Traction Rectifiers

In DC Traction Substations one disconnector or load Break switch is normally installed downstream each High Speed Circuit Breaker thus allowing, in case of failure, to isolate the circuit breaker granting the safety of the system.

Moreover the layout is completed by a by-pass or parallel disconnector or Load Break switch connecting two feeders and allowing to grant the service continuity in case of failure of one circuit breaker thus increasing the safety of the full system and introducing a further isolating step. This disconnector is normally motorised for remote control (opening and closing).



COET

High Power Converters

FRIEM designs, manufactures and delivers worldwide all types of Diode, Thyristor and IGBT Power Converters for Industrial and Traction Applications.

FRIEM has manufactured and installed over 2000 high power converters and has been providing more than 50 million Amps worldwide since 1950.



Solar Inverters & Storage

FRIEM RECon series and HYCon are comprehensive line of Standard / Hybrid Inverters and Power Converters developed in order to respond to the multiple and different requirements of Solar Energy Production, Energy Storage Systems applied to Mini-Grid and Energy Management.

In energy storage applications, FRIEM's solution is able to integrate multiple sources and manage the Energy supplied to the loads, optimizing the reliability, availability and profitability of the Mini-Grid thanks to the huge experience in Solar PV field and industrial automation.



Charging Stations

Yess.energy Srl is established in July 2016 with the goal of offering integrated engineering solutions innovations in the charging infrastructure sector for electric vehicles.

Aktif distributes YESS Energy recharge stations for electrical vehicles. Rechargers are designed using different technological combinations with IoT and e-charge environment.

By the help of web portal and mobile applications it is possible to make payment, monitoring charging process and having reservations.



Some References

ACIBADEM



Antalya State
Airports Authority



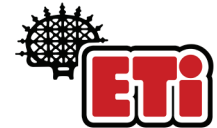
aselsan



AZERBAIJAN REPUBLICAN SCIENTIFIC NATIONALLY
CENTRAL ONCOLOGY CENTER



BAŞKENT ÜNİVERSİTESİ



Some References



Some References



Watt White!

White...
Color of the beginning...
White, color of the purity, honesty and clarity...

Color of the stability and continuity, trust and quality...

Since 2010, we decided to apply white color which symbolizes
all of these values to all of our products.



Headquarters

Bayraktar Blv. Şehit Sk. No:5 Aktif Plaza
34775 Şerifali-Ümraniye-İstanbul / Turkey
Tel : +90 (216) 314 93 20
Faks : +90 (216) 314 93 60
www.aktif.net - info@aktif.net

Switchgear Factory

Akşemsettin Mah. Çatalca sk. No: 113
06930 Sincan - Ankara / Turkey
Tel : +90 (312) 269 46 02
Fax : +90 (312) 269 45 01
www.aktif.net - info@aktif.net

Resistor Factory

Pirahmetler mh. D-100 Yanyol cd. 78/A
Erenler 54200 - Sakarya / Turkey
Tel : +90 (264) 276 64 50
Fax : +90 (264) 276 64 52
www.aktif.net - info@aktif.net