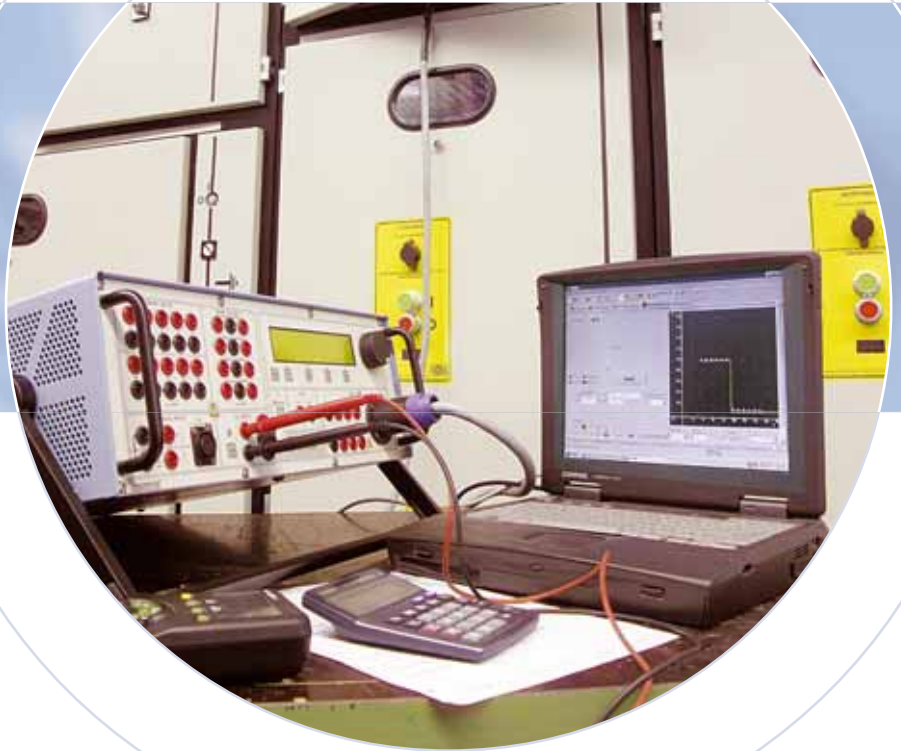


Switch over to SENTEG



Switch over to our Services that guarantee Safety, Flexibility and High Quality



We have the know-how!
We have had over 20 years experience in designing, engineering and manufacturing switchgear for the power engineering sector as well as for electrical plants and auxiliary units with our focus on medium and low voltage systems.

We are future-oriented

Our specially trained staff develop innovative products and solutions that not only meet the requirements and expectations of the present-day market, but also anticipate future requirements.

We are flexible

Our responsiveness to our clients and our flexibility enable us to adapt our processes, our products and our services to our clients' requirements.

We guarantee high quality

The high quality standard of our products is guaranteed by our commitment to a Total Quality Management system and the fact that we exclusively produce at our Frankenthal site.

We are competent

A combination of experience, expertise and commitment to high quality standards makes us a competent partner for realizing complete solutions for electrical plants of almost any kind.

Switch to full power



Product Range:

- MAnU, a type-tested air-insulated medium voltage switchgear up to 36 kV with built-in, withdrawable or draw-out switching devices
- MoNA, a type-tested low voltage switchgear up to 36 kV with built-in, withdrawable or draw-out switching devices
- Motor Control Center
- Installation distribution boards and control cabinets
- Low voltage modular units
- Custom-made, specially constructed medium and low voltage systems

Services:

- Designing, engineering and installation of complete switchgear and transformer stations
- Complete installation of power supply after hand-over by a power-supply company, transformer stations and cabling included
- Repair, fault-clearing and maintenance service
- Retrofitting of existing medium and low voltage systems in accordance with VDE and BGV A2 specifications.



The SENTEG Principles are: a modular design, the utmost user-friendliness and environmentally friendly production



Observing the highest quality standards concerning the production process and the materials we use as well as meeting technical requirements to perfection are a matter of course to us. The SENTEG Principles exactly tell you what you may expect from every single one of our products.

The modular design provides the utmost flexibility

We are able to meet almost any kind of special requirements by our clients and local conditions thanks to the modular design of our switchgear and our variability with regard to means of production, dimensions, time schedules and the kind of painting. In close cooperation with our clients we make sure that our systems achieve the highest possible efficiency and optimum space utilization.

The highest-possible user-friendliness guarantees maximum safety and a perfectly smooth operating process

SENTEG switchgear distributes and control the flow of high-power currents; therefore the safety of the

users is our special concern. We not only feel responsible for meeting the technical specifications required by law but also for providing a simple and clear mode of operation and intelligibility of all displays. Additional safety is guaranteed by our providing extensive documentations, a thorough training of users and full maintenance service.

We keep our production process environmentally friendly by conviction!

“The purpose of Technology is to serve mankind”. We consider ourselves as part of the whole and we are proud of contributing our share to creating a modern world worth living in. To handle resources in a responsible way is an important aspect of our philosophy. All our frames, modules and coverings are made of galvanized sheet metal. By nibbling, tilting and bolting together all components we avoid processes such as welding, grinding and cleaning which may be harmful to the environment.

Low Voltage Switchgear MoNA



To manufacturers who do not make their own switchboards we offer MoNA as a modular unit with cut-outs for the doors and all necessary components.

The MoNA switchgear system has been developed by SENTEG in accordance with the specifications DIN VDE 0660/section 500, IEC 439-1 and EN 60439-1 for type-tested and partially type-tested low voltage switchgear combinations.

MoNA is equally suitable for being upgraded as a power supply system (add-on or single switchgear sections) or as a control system, as well as a combination of both.

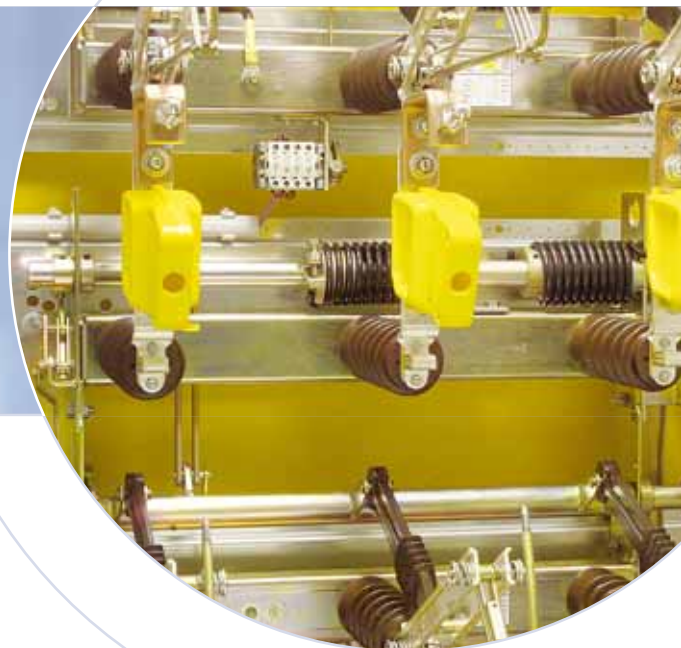
Furthermore, different brands of switchgear may be easily extended with MoNA.

Technical Data	Energy add-on switchgear section	Energy single switchgear section
rated short-time current	up to 100 kA	up to 65 kA
rated impulse current	up to 220 kA	up to 150 kA
rated current main busbar	up to 5000 A*	up to 2500 A*
rated current field distribution bar	up to 2500 A	

* higher current on request



Medium Voltage Switchgear MAnU (up to 36 kV)



MAnU, a type-tested and Pehla-tested¹⁾ medium voltage switchgear system has been developed by SENTEG in accordance with the specifications DIN VDE 0670/section 6, IEC 298 and EN 60298 for metal-enclosed, a.c.-operated switchgear for a rated voltage of over 1 kV up to and including 52 kV.

The MAnU programme includes medium voltage switchgear up to 36 kV

- with built-in, withdrawable or draw-out switching devices
- with single or double busbars
- as an enclosed, partially bulkheaded or fully bulkheaded version

The air-insulated medium voltage switchgear MAnU offers considerable advantages with regard to handling, maintenance and future extensions. MAnU has been designed for the use in power supply facilities, in power stations, industrial plants and public buildings.

Technical Data	12 kV	24 kV	36 kV
rated to withstand alternating voltage	28 kV	50 kV	70 kV
rated to withstand lightning impulse	60 kV / 75 kV	95 kV / 125 kV	145 kV / 170 kV
rated busbar current	up to 4000 A	up to 2500 A	up to 2500 A
rated short-time current (1 s)	up to 40 kA	up to 25 kA	up to 25 kA
rated impulse current	up to 100 kA	up to 63 kA	up to 63 kA

1) PEHLA (Prüfung Elektrischer Hoch-Leistungs-Apparate = Testing of electrical high-power systems) is an association of high-power testing laboratories in Germany and Switzerland. The members are ABB, ALSTOM, FGH Engineering & Test GmbH, IPH Institute, and Siemens.

Special Constructions



Thanks to our great expertise, state-of-the-art designing software and CNC-controlled production plants we are extremely capable of dealing with special construction requests. We also provide subsequent retrofitting and extensions of existing switchgear, regardless of the original manufacturer, predetermined components and dimensions.

A few examples

- switchgear for combustion furnaces up to 36 kV/2500 A
- retrofitting, such as the exchange of small-oil-volume/vacuum circuit breakers
- upgrading of medium and low voltage switchgear (BGV A2)
- extension of existing switchgear
- 50/60 Hz distributors
- adaptation of low voltage switchgear to local conditions
- low voltage frames for compact stations



Switch over to a high-powered team



We are proud of being part of a powerful group of specialised companies which are active in the area of electrical engineering and installations. Each member of this cooperation is an independent company, well established in the market. Together, we are a well-functioning team and the perfect partner for tackling complex tasks.

For detailed information please contact:

Alpha Elektrotechnik GmbH

Since 1991 Alpha Elektrotechnik GmbH have designed and carried out electrical installations and installed data networks. For further details please go to www.alpha-harbke.de

GFI Gesellschaft für Industrietechnik mbH & Co. KG

Since the formation of the company in 1982, GFI have been active in the areas of electrical installations, installation of data networks, passive fire protection, metal and dry constructions and asbestos sanitation. For further details please go to www.gfi-lorsch.de

Other partner companies for electrical installations outside Germany are:

Alpha Thalys Hellas Ltd. – Athens/Greece

GFI-Becker India Pvt. Ltd. – Thane/India

SENTEG Schaltanlagen für Energietechnik GmbH
Industriestraße 36a · D-67227 Frankenthal/Pfalz
Telefon: +49 (0) 62 33/3 79 17-0 · Telefax: +49 (0) 62 33/3 79 17-15
E-Mail: info@senteg.de · Internet: www.senteg.de

SENTEG
Schaltanlagen für Energietechnik GmbH