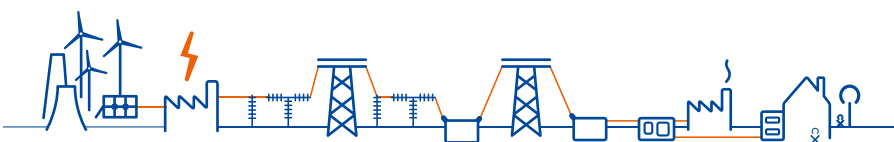


REACTORS



SGB-SMIT AT A GLANCE

1913 

HISTORY

... of steadily growing expertise

3,100 

EMPLOYEES

... are the key to our success

14 

SITES

We are one of the world's leading manufacturers of distribution and power transformers



TRANSFORMING TOGETHER THE FUTURE OF ENERGY

The SGB-SMIT Group manufactures reliable and efficient transformers in line with demand and adapted to our customers and their requirements for applications worldwide.

Sales and service centers on all continents ensure optimum processes.

Our goal is to help our customers accelerate the transition from conventional energy sources to renewable alternatives and the expansion of electrification.

We secure with our products a safe and constant supply of energy.



PRODUCTS

- large power transformers
- medium power transformers
- large liquid-immersed distribution transformers
- liquid-immersed distribution transformers
- dry type transformers
 - cast resin transformers
 - VPI transformers
- shunt reactors
- series reactors
- phase shifters
- Lahmeyer-Compactstationen (compact substations)

Transformers from 30 kVA up to incl. 1,200 MVA in the voltage range up to 765 kV.



QUALITY MANAGEMENT

The SGB-SMIT Group is certified in accordance with:

- DIN ISO 9001
- DIN ISO 14001
- DIN ISO 45001

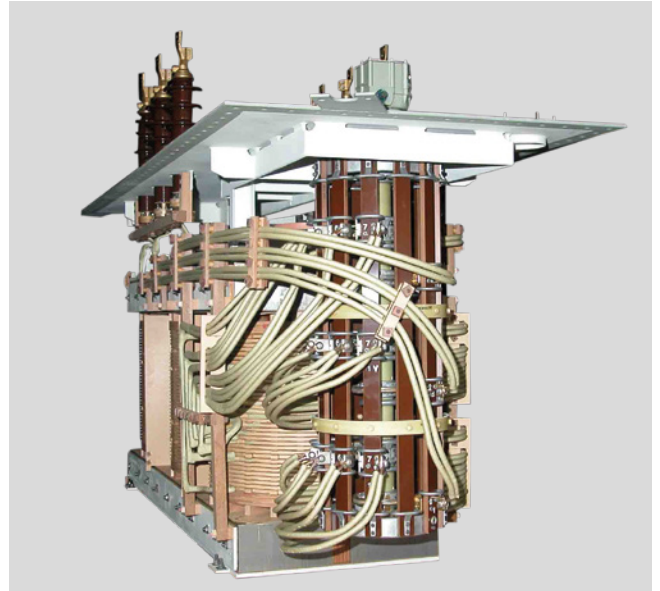


TECHNOLOGIES

Technologies for conventional and renewable energy.

CONSTANT PERFORMANCE FOR ALL GRIDS

Reactors from the SGB-SMIT Group are the compensating element in high-voltage grids, ensuring stable transmission regardless of the line lengths.



FIELDS OF APPLICATION

POWER HARMONIZATION IN POWER DISTRIBUTION

To ensure efficient transmission and distribution of energy, power grids have to be able to compensate all kinds of variables, such as voltage and load fluctuations, deviating resistances or overvoltages.

Reactors produced by the SGB-SMIT Group provide the required balance by stabilizing network variations and reducing overvoltages. Thus, they ensure highly reliable operation, protecting your investment in modern high-voltage grids.

SPECIAL FEATURE

Like the transformer family of the SGB-SMIT Group, reactors are designed individually according to customer's specifications. They can be integrated into your energy infrastructure perfectly.

VARIANTS

INDIVIDUALIZATION FOR EACH FIELD OF APPLICATION

We manufacture reactors completely matching your requirements. Depending on the intended purpose and capacity, SGB-SMIT provides you with single- and three-phase compensation reactors and current limiting reactors in a variety of designs:

- Iron core with air gaps to avoid saturation of the ferrite core
- Without iron core for high frequencies

We would be pleased to provide you with a detailed consultation in order to establish which reactor is the most economically efficient and reliable solution for your specific field of application based on factors such as spare requirements, noise development and costs.

SPECIAL FEATURE

The SGB-SMIT Group succeeded in transferring the methods developed for noise reduction of transformers to reactors – enabling our products to be considerably more silent and more environmentally compatible.



PROGRAM ---

SINGLE-PHASE

Reactive power up to 30 MVar

Voltage up to 170 kV

THREE-PHASE

Reactive power up to 50 MVar

Voltage up to 170 kV

SINGLE-PHASE, CONTROLLABLE

Reactive power up to 30 MVar

Voltage up to 170 kV

Control range 40 – 100%

THREE-PHASE, CONTROLLABLE

Reactive power up to 50 MVar

Voltage up to 170 kV

Control range 40 – 100%

OUR REFERENCES SPEAK FOR THEMSELVES

From technical specification via design and production, down to assembly and integration into the energy infrastructure, every step of development for our reactors takes customer specifications and grid configurations into account. Even during the production period, additional improvements and required changes can be implemented. The result, highly specialized, low-noise reactors which are optimally prepared for their tasks. Consequently, SGB-SMIT reactors can be found world-wide operating successfully and sustainably under a wide variety of environmental conditions, and often with unique specifications.



REFERENCE DESIGNS

50 MVar

Oil compensation reactor

- 50 MVar, three-phase, 50 Hertz
- 30 kV, 170 kV BIL
- Reactance 18 Ohm/phase
- 5-leg air gap core
- Installation site: Germany

25 MVar

Oil neutral point limiting reactor

- 25 MVar, single-phase, 50 Hertz
- 150 kV, 750 kV BIL
- Reactance 300 Ohm/phase
- Air gap core design
- Installation site: Netherlands

23.3 MVar

Oil compensation reactor

- 23.3 MVar, single-phase, 60 Hertz
- Control range 7.5 MVar – 23.3 MVar in 10 steps
- 69 kV, 350 kV BIL
- Reactance 204 - 643 Ohm/phase
- Air gap core design
- Installation site: Northeastern USA

50 MVar

Oil compensation reactor

- 50 MVar, three-phase, 50 Hertz
- 115 kV, 550 kV BIL
- Reactance 577 Ohm/phase
- 5-leg air gap core
- Installation site: Austria

CONTACT



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