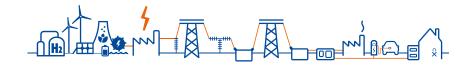


# LAHMEYER COMPACT SUBSTATIONS







## SGB-SMIT AT A GLANCE

1913

3.300

15

HISTORY

... of steadily growing expertise

EMPLOYEES

... are the key to our success

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

SITES



### 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.



#### **QUALITY MANAGEMENT**

The SGB-SMIT Group is certified in accordance with:

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









#### **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.



#### **TECHNOLOGIES**

Technologies for conventional and renewable energy.

## FLEXIBLE, EFFICIENT AND SECURE

SBG Neumark — market leader for light-weight designed transformer-substations — is the reliable and flexible partner for the fast and inexpensive delivery of individual, safe and high-quality complete solutions..



# VOLTAGE RANGE UP TO 36 kV POWER RANGE UP TO 4000 kVA

Features of Lahmeyer Compact Substations:

- · ready-to-connect
- · very robust
- · compact design
- · highest safety
- · easy to transport
- easy to install
- · nearly maintenance free
- · eco-friendly
- sustainable

# TRANSFORMER & SUBSTATION DOUBLE THE EXPERTISE FROM A SINGLE SOURCE

- experience from over 60 years
- · dedicated to our customers
- future-oriented enhancements
- · highly skilled workers
- · continuous inspections
- · highest quality and environmental standards
  - ISO 9001 certification
  - ISO 14001 certification
  - ISO 45001 certification
  - ISO 50001 certification
- excellent cost-performance ratio





# MODULAR SYSTEM, DIFFERENT SIZES

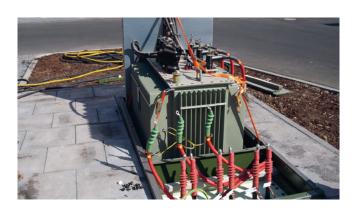


- · customized compartment configuration
- place for up to two transformers
- Individually replaceable housing elements (e.g. for adding compartments) without need for new type test
- · compact and space-saving
- easy access
- easy uprating (different or additional transformer)

Substation type	Footprint (length x width)	Maximum rated power	Maximum weight*
LCS-E (max. 24 kV)	2,540 x 1,180 mm	630 kVA	3,200 kg
NDV630 (max. 24 kV)	3,000 x 1,550 mm	630 kVA	7,500 kg
NDV1100 (max. 24 kV)	3,040 x 2,440 mm	1,600 kVA	11,500 kg
NDV2510 (max. 24 kV)	3,000 x 2,400 mm	2,500 kVA	9,200 kg
WPS2500 (max. 36 kV)	4,500 x 2,500 mm	4,000 kVA	14,000 kg

<sup>\*</sup>weight with max. transformer size; lighter with smaller transformer





### **USE OF WELL-KNOWN SWITCHGEAR BRANDS**

Medium voltage:

- Siemens
- ABB
- Schneider Electric

#### Low voltage:

- ABB
- UESA
- · Jean Müller
- EFEN
- Siemens



## **WORLDWIDE OPERATION SINCE 1963**

**APPLICATIONS** 

Lahmeyer compact substations from SBG guarantee functional reliability in all the climate zones of the world.





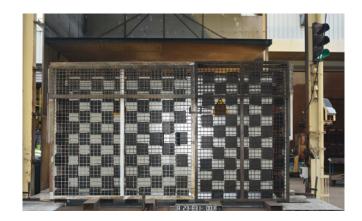
## HIGHEST SAFETY AND RELIABILITY

- factory-assembled and routine-tested units
- safety-tested according to IEC 62271-202
- · long lifetime
- · routine-tested cable-connections
- independent and tested arc fault protection system [20 kA, 1s]
- EMC safety (< 100  $\mu$ T)
- ingress protection (IP-protection)
- · safe closing
- · protection against intrusion of ground and surface water



#### SMALL - LIGHTWEIGHT - UNREMARKABLE

Thanks to its very compact dimensions, SBG compact substations easily blend into the cityscape and environment.







## INDIVIDUAL REQUIREMENTS



### **VARIABLE TRANSFORMERS**

- transformers with 9-step tapping range
- · tap changing on load
- · remote or auto control
- tap settings according to customer specifications
- for use in all substation types

### INDIVIDUAL DESIGN

- individual coloring (RAL-color system) and graffiti-protection coating possible
- enclosure made of galvanised steel sheet
- · 100% pore free powder coating
- · very high corrosion protection
- resistant to heat, cold, UV radiation, salty and aggressive environments (e.g. in industrial areas)
- · sustainable and reusable materials







### **DELIVERY & INSTALLATION**

- · transport and unloading with crane truck
- water protected cable inlets without gaskets
- · easy foundation grounding





### SERVICES AND SPECIAL SOLUTIONS



# A VARIETY OF SERVICES AND SPECIAL SOLUTIONS

- · dry-type transformers (e.g. for water protection areas)
- · mobile substations on trailer or on skids
- rental substations
- installation of remote monitoring and remote control technology
- substations for traction current
- on-site conversions (e.g. for uprating)
- · train air-conditioning systems
- · systems for reactive power filtering
- systems for (short-time) low-resistance neutral earthing (NOSPE / KNOSPE)





### E-MOBILITY

- · supply station with rapid charging systems
- · ideally suited for use at service areas and truck stops
- planning and production according to individual customer specifications
- · combined solutions with feed-in possible
- · Europe-wide deployment
- experience in supplying different distribution network operators



#### **INFORMATION & CONSULTING:**

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