

SGB-SMIT USA

CAST RESIN TRANSFORMERS

UP TO 25 MVA, 35 kV, 200 kV BIL

Rail Systems | Gas & Oil | Commercial | Industrial | Data Centers

DEPENDABLE POWER SOLUTIONS

With over 50 years of experience, SGB-SMIT USA is a global leader in cast resin transformers. Our advanced designs deliver exceptional reliability & superior safety for the most demanding applications.

KEY DESIGN FEATURES

ADVANCED COIL TECHNOLOGY

- Vacuum-cast, fiberglass-reinforced epoxy HV windings
- Fully encapsulated prepreg or cast resin LV windings
- Double-layer winding design
- IBiT® technology is an SGB-exclusive design

THERMAL & OVERLOAD PERFORMANCE

- Integrated cooling ducts
- Up to 450% short-term overload capability
- Up to 140% continuous overload with forced cooling

SAFETY & RELIABILITY

- Self-extinguishing, low fire risk (F1 classification)
- Designed for safe operation in adverse environments
  High resistance to thermal shock & technical stress

LOW MAINTENANCE DESIGN

- Air-cooled (no fluids required)
- Minimal maintenance over lifecycle
- 90% recyclable materials

RATINGS

- Power range: up to 25 MVA
- Voltage class: up to 35 kV, 200 kV BIL
- Frequency: 50 / 60 Hz
- Temperature Rise: 80°C / 115°C
- Insulation Class: 180°C

CERTIFICATIONS & STANDARDS

GLOBAL STANDARDS

- IEEE Standard: C57.12.01:2020
- ANSI compliance
- DOE & NRCan efficiency standards
- IEC 60076-11 (Dry-Type Transformers)

CERTIFICATIONS & PERFORMANCE

- UL & c-UL certified
- ISO 9001, 14001, 18001

SGB-SMIT-USA.COM/CAST-RESIN

Worldwide shipping & services from our shop located in Ohio.



ACCESSORIES & EQUIPMENT

- Grounding provisions
- Fan/blower package
- Temperature monitoring
- Anti-vibration/isolation pads
- Seismic-resistant design

Digital thermometer
Current transformers
IBiT® transient-resistant design
Surge arrestors
Heater package
Custom HV & LV bus design with optional braided flex

ENCLOSURES

- Cooling options: AN & AF
- Side & bottom entries
- Air inlet & outlet ventilation/cooling
- ANSI 61 gray paint standard
- Provisions for jacking & skidding

Control cabinet
Ground bus
Lifting provision
IR windows
HV & LV ATCs
Hinged doors - optional
Knock-down style design

TESTING

- SGB-SMIT USA operates an advanced in-house test laboratory to ensure cast resin transformers meet customer specifications & international standards.

ROUTINE TESTS

Winding resistance measurement

- Transformer ratio & polarity/vector group verification
- No-load losses & current
- Applied power frequency withstand voltage
- Induced power frequency withstand voltage
- Partial discharge measurement

TYPE TESTS

- Lightning impulse voltage test
- Temperature rise test
- Sound level testing
- Dynamic short-circuit test
- Special tests



READY TO WORK WITH US?
REQUEST A QUOTE TODAY!

SGB-SMIT USA

CAST RESIN TRANSFORMERS
Louisville, OH | 330.871.2444