



COMPACT GAS INSULATED SWITCHGEAR



Compact Gas Insulated Switchgear (GIS) up to 145kV



Applications:

GRID's Gas Insulated Switchgear (GIS/HGIS) combines circuit breakers, disconnectors, and other key substation components in a compact, grounded enclosure. Built to IEC 62271-203 standards, it delivers high reliability and space efficiency. Ideal for urban, industrial, or underground installations.

Features:

- Advanced Patented Technology:** Proprietary thermal insert connection box & special shaft seal and reliable guide system.
- Enhanced Safety and Durability:** Strong anti-seismic performance ensures stability and safety under extreme conditions.
- Maintenance-Free Design:** Oilless, gasless, and low-noise operation with minimal maintenance requirements.
- Modern, Innovative Design:** Compact and updated structure aligned with the latest GIS technology standards.
- Customizable Configuration:** Designed to meet diverse customer specifications and application needs.
- High Reliability and Performance:** Excellent insulation reliability and high breaking capacity.

Lead Time:

Approximately **12-24 months** after drawings approved.

COMPACT GAS INSULATED SWITCHGEAR

| Basic Parameters | | | |
|--|---|---------------------------|---------------------------|
| Rated Voltage | 126 kV | 145 kV | |
| Rated Current/Main Bus Rated Current | 2500 A / 3150 A | 2500 A / 3150 A | |
| Rated Frequency | 60 Hz | 60 Kz | |
| Rated Short-Time Withstand Current | 40/3 kA/s | 40 kA/s | |
| Rated Peak Withstand Current (Peak) | 100 kA | 100 kA | |
| Rated Insulation Level | Rated Power Frequency Withstand Voltage For 1 Min | To Earth/Between Poles | 230 kV |
| | | Open Contacts | 230+73 kV |
| | Rated Lightening Impulse Withstand Voltage (Peak) | To Earth/Between Poles | 550 kV |
| | | Open Contacts | 550+103 kV |
| SF6 Zero Gauge Pressure Rated Power Frequency Withstand Voltage For 1 Min | To Earth | 126/ $\sqrt{3}$ X1.3 kV | 145/ $\sqrt{3}$ X1.3 kV |
| | Between Poles | 126/ $\sqrt{3}$ X1.3 kV | 145/ $\sqrt{3}$ X1.3 kV |
| Radio Influence Level (At 1.1 Times Rated Pole Voltage) | | \leq 500 μ V | \leq 500 μ V |
| Partial Discharge (Full Bay) | | <5 pC | <5 pC |
| Rated SF6 pressure (20°C) | Breaker | Rated Voltage | 0.60 MPa |
| | | Alarm Pressure | 0.55 MPa |
| | | Blocking Pressure | 0.50 MPa |
| | Other Gas Room | Rated Voltage | 0.50 MPa |
| | | Alarm Pressure | 0.40 MPa |
| SF6 annual leakage rate | | \leq 0.5 % | \leq 0.5 % |
| Short circuit current of fault making earthing switch (peak) | | 100 (5 times) kA | 100 (5 times) kA |
| Main bus change-over current of three-position switch | | 30 V / 1600 A / 100 times | 30 V / 1600 A / 100 times |
| Rated breaking short circuit current of circuit breaker | | 40 kA | 40 kA |
| Electric life of circuit breaker | | 20 Times | 20 Times |
| Mechanical life of circuit breaker, three-position switch and earthing switch | | 10,000 Times | 10,000 Times |

Working Conditions:

- Max. ambient temperature: +40°C
- Min. temperature: -40°C (outdoor installation)
- Reek Pressure kPa \leq 1.8
- Altitude: \leq 1000m
- Relative humidity: \leq 90% (25°C) (without condensation)
- Customized engineering available on request



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