



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	275 kV
		Open Contacts	230+73 kV	275+84 kV
	Rated Lightening Impulse Withstand Voltage (Peak)	To Earth/Between Poles	550 kV	650 kV
		Open Contacts	550+103 kV	650+118 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)			≤500 μ V	≤500 μ V
Partial Discharge (Full Bay)			<5 pC	<5 pC
Rated SF6 pressure (20°C)	Breaker	Rated Voltage	0.60 MPa	0.60 MPa
		Alarm Pressure	0.55 MPa	0.55 MPa
		Blocking Pressure	0.50 MPa	0.50MPa
	Other Gas Room	Rated Voltage	0.50 MPa	0.50 MPa
		Alarm Pressure	0.40 MPa	0.45 MPa
SF6 annual leakage rate			≤0.5 %	≤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 ≤ 1.8
- Altitude: ≤1000m
- Relative humidity: ≤90% (25°C) (without condensation)
- Customized engineering available on request



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