

Grid Solutions

ZF16-363

Gas-Insulated Switchgear 363kV, 4000A/5000A, 50kA

Leistung Energie is consistently making the most of 50+ years experiences in design, material selection, innovation, engineering, development, manufacturing and servicing of the state-of-the-art gas-insulated substations.

Leistung Energie's ZF16-363 GIS is capable of responding various challenges of networks up to 363kV for all applications such as power generation, transmission and heavy industries.

High Availability

- More than 50 years of manufacturing experience in HV electrical equipment
- More than 33,000 GIS bays in operation worldwide
- More than 90% of components manufactured and controlled by ourselves
- Proved safe operation cases in extreme environments, such as hot weather, high and cold area and earthquake-prone regions, etc.

High Flexibility

- Adaptable design and layout to meet the requirements of the user
- Customized design for specially need
- Smart solution for smart substations
- High compatibility to associated equipment

Short Site Work

- Compact structure and modular design require less installation work
- Qualified mechanisms and components demand less maintenance



Lowest Cost of Land and Civil Works

- Most compact GIS footprint

Smart Grid Features

- Digital monitoring, control and protection

Environment Friendliness

- Safe sealing system to keep 0.5% annual low gas leakage rate
- Complete and reliable gas handling equipment to tackle the SF₆ gas

Customer Benefits

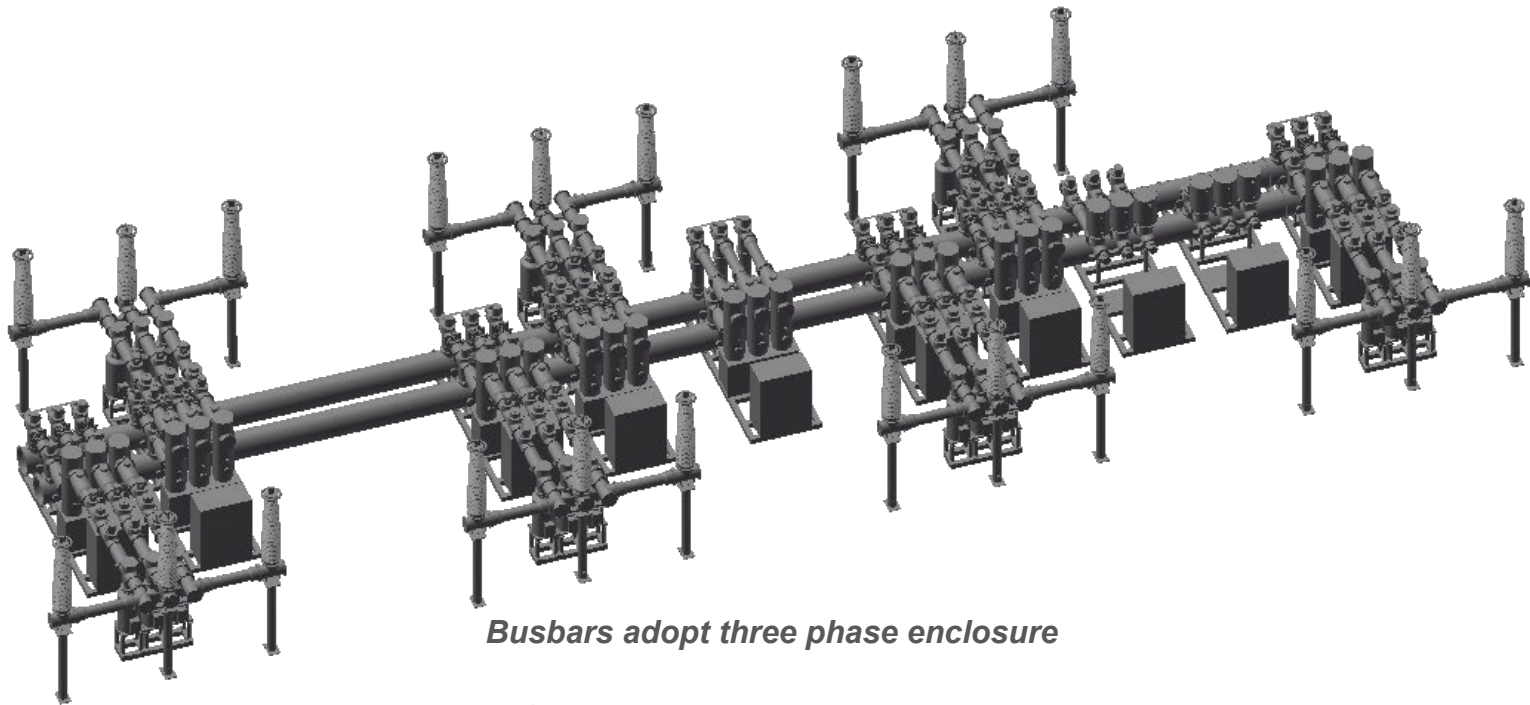
- Fully Type Tested & Field-proven Reliability
- Maximum Safety
- Compact but Accessible
- First-class Availability
- Low Total Cost of Ownership
- Smart Grid Ready
- Low Environmental Impact
- Competitive Cost
- Short Lead Time
- Fast Response to Your Need
- Fully Technical Support and Service

ZF16-363 Configuration

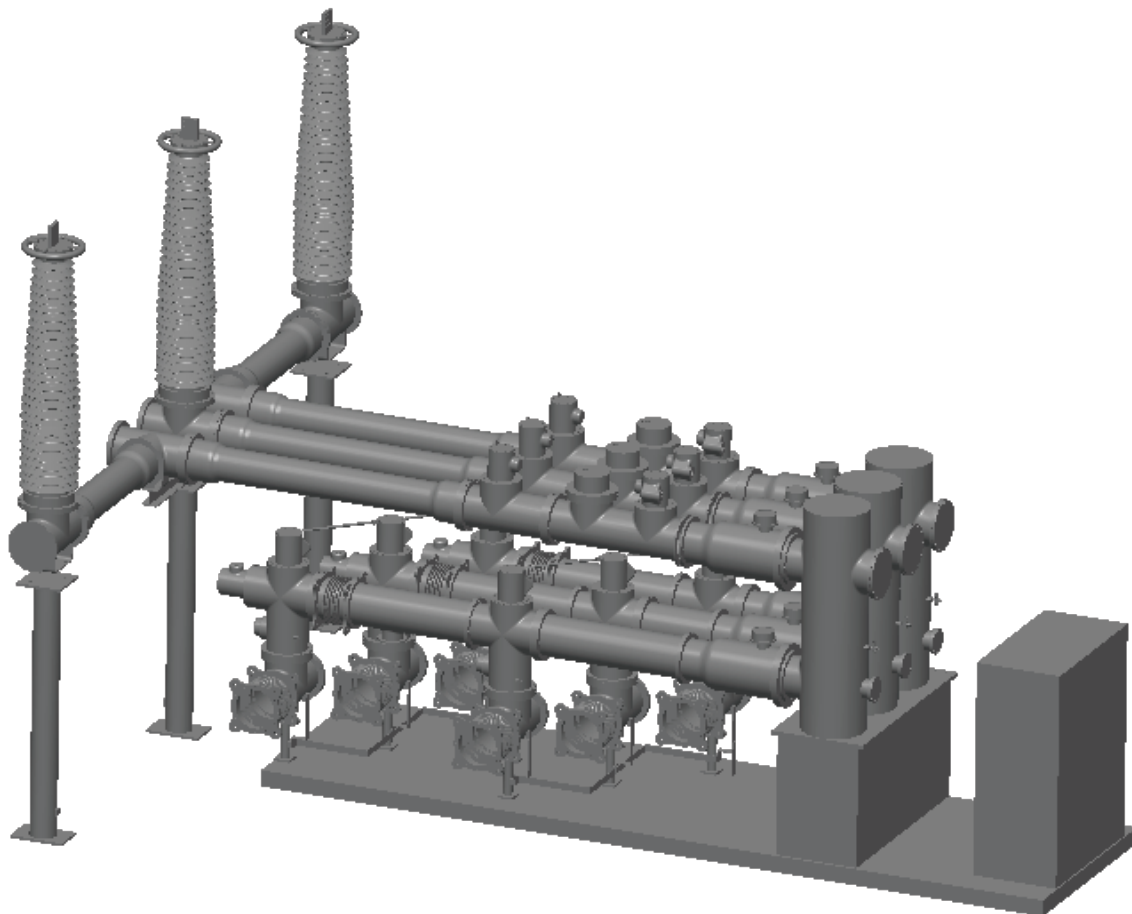
Applicable for single busbar, double busbar and one and a half arrangement;

363kV, 4000A, 50kA adopts 3 phases enclosure for main busbar, single phase enclosure for other components;

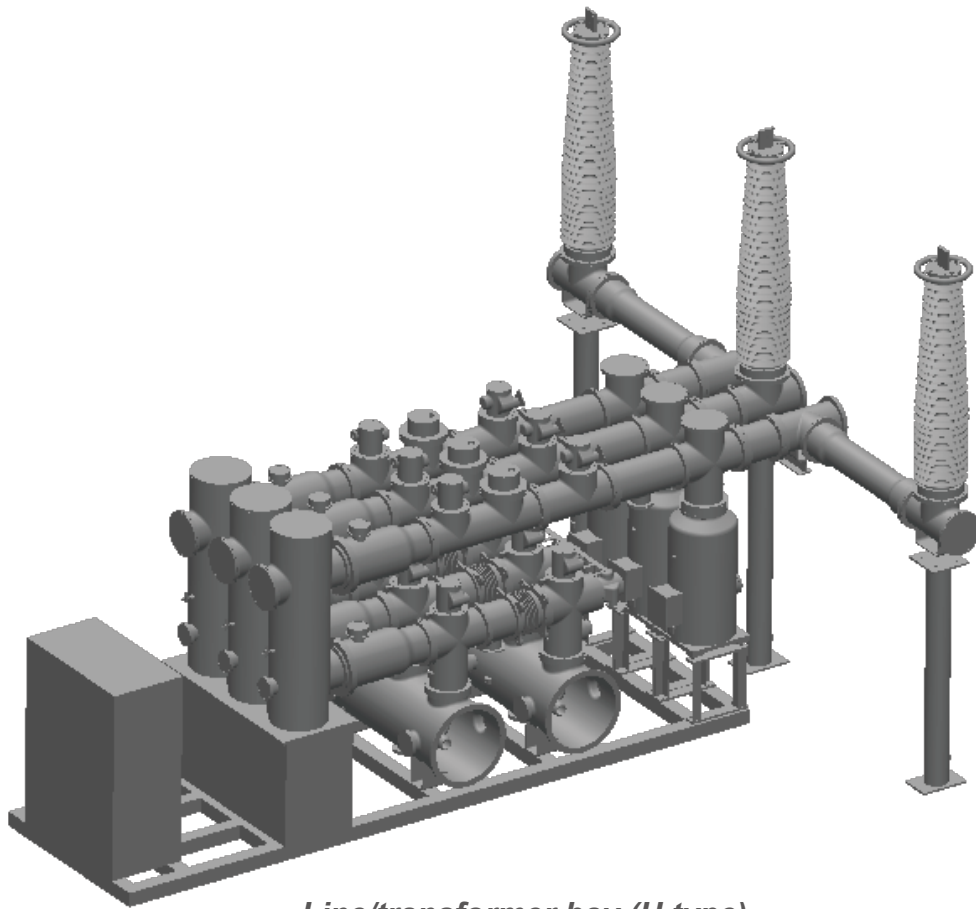
363kV, 5000A, 63kA adopts single phase enclosure;



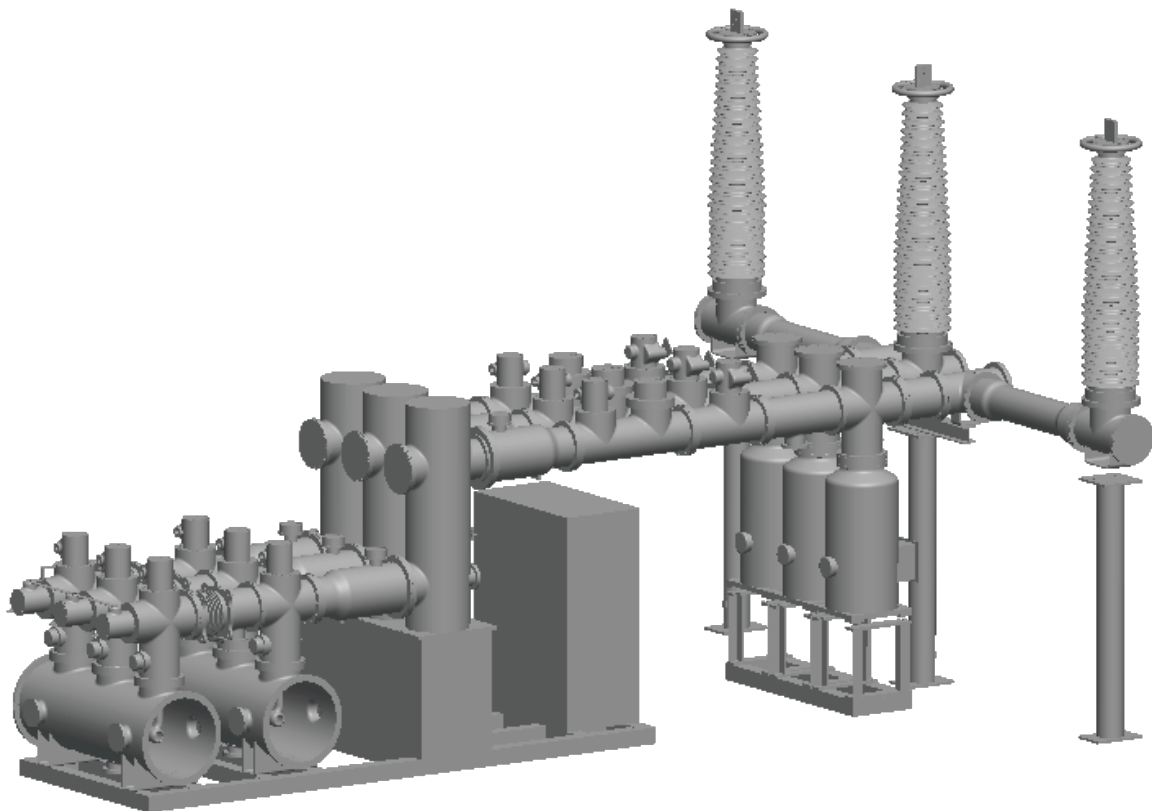
Busbars adopt three phase enclosure



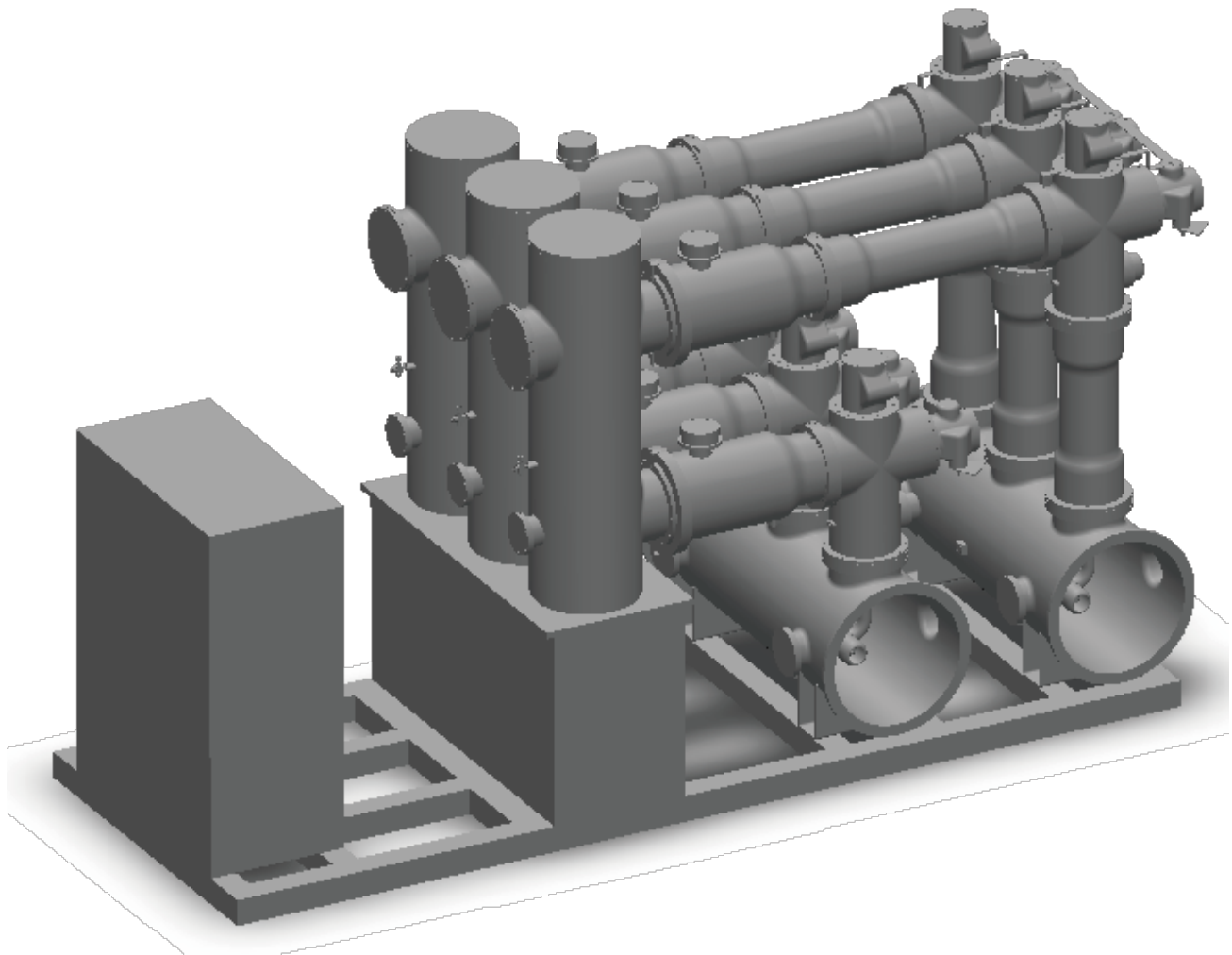
Busbars adopt single phase enclosure



Line/transformer bay (U type)



Line/transformer bay (Z type)



Coupler bay

Ratings

General		
Reference electrotechnical standards		
Rated voltage	kV	Up to 363kV
Rated frequency	Hz	50
Rated normal current	A	4000/5000
Rated insulation level		
Rated power frequency withstand voltage Phase-to-phase/across open switching device	kVp	520/520+210
Rated lightning impulse withstand voltage Phase-to-earth/across open switching device	kVp	1175/1175+295
Rated switching impulse withstand voltage Phase-to-earth/across isolating distance	kVp	950/850+295
Duration of short circuit	s	3
Rated short-time withstand current	kA	50
Rated peak withstand current	kA	125
Annual SF6 gas leakage rate	%	< 0.5
Installation		
Indoor & outdoor		
Ambient temperature range	°C	-25~+55; -40 (for special order)
Circuit Breaker		
First pole to clear factor		1.3
Short-circuit breaking current	kA	50/63
Short-circuit making current	kA	125/160
Operating sequence		O-0.3s-CO-180s-CO
Drive type		Hydraulic spring
Breaking time	cycle	2
Closing time	ms	≤85
Mechanical endurance	class	M2
Capacitive switching	class	C2
Disconnecter and Low-Speed Earthing Switch		
Capacitive current switching	A	
Bus-transfer current switching capability	A/V	1600/300
Mechanical endurance	class	M2
Make-Proof Earthing Switch		
Making current capability	kAp	160
Switching capability-electromagnetic coupling	A/kV	600/35
Switching capability-electrostatic coupling	A/kV	50/100
Mechanical endurance	class	M2

Other data available on request



**United Kingdom | Australia | China | Chile | Germany |
Hongkong | Indonesia | Malaysia | Russia | Singapore |
South Africa | Thailand | Vietnam**

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