

ZF15

800

INTRODUCTION



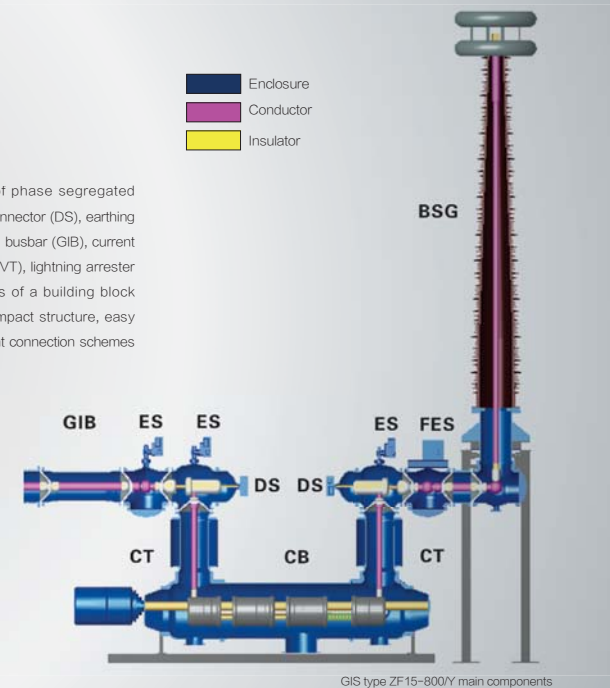
GIS type ZF15-800 in operation at Xining 750kV S/S

800kV GIS type ZF15-800 is a new type GIS developed by NHVS with compact structure, small space requirement, high reliability and suitable for high altitude area.

The product has passed the test in Machinery Industry HV Electrical Product Quality Test Centre and National HV Electrical Product Quality Test Centre (Xi'an HV Electric Institute). Its technical property has reached the international advanced level.

OVERALL STRUCTURE

GIS type ZF15-800 is composed of phase segregated components. Circuit breaker(CB), disconnector (DS), earthing switch (ES), fast earthing switch (FES), busbar (GIB), current transformer (CT), voltage transformer(VT), lightning arrester (LA) etc., are standardized modules of a building block system with flexible arrangement, compact structure, easy for extension and is suitable for different connection schemes requirement.



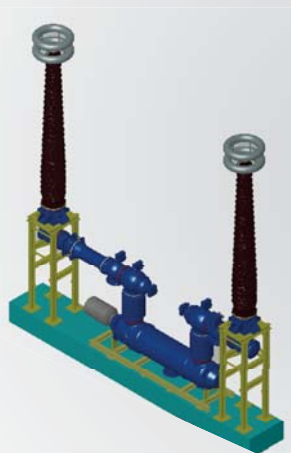
GIS type ZF15-800/Y main components

ZF15

800

MAIN FEATURES

1. GIS is assembled with standardized modules. All the modules are with unified interface and highly interchangeable which can cater for different connection schemes and arrangement according to customer requirement. It is also suitable for future extension of existing project.
2. Use of chemical anchor bolt for installation of GIS and support structure with high reliability and suitable for adverse weather condition. There is no need to pre-install steel channel into the foundation, hence the complexity and cost is reduced during the construction of the foundation.
3. As to the temperature compensation of GIS bus enclosure, new-type parallel compensation expansion joint busbar and self-balancing expansion joint busbar are adopted to realize large amount of compensation and high reliability.
4. Use of aluminium alloy as enclosure with light weight, good conductivity, no eddy current loss and highly anti-corrosion performance
5. New and compact circuit breaker with direct movement arc-extinguishing chamber is used in GIS. It takes less operation power but has stronger breaking capacity. It can be maintenance-free to break rated short circuit current at 50 kA for 20 times and to break rated short circuit current at 63 kA for 16 times.
6. GIS outgoing bushing can either be porcelain or composite type. They have passed the high altitude insulation test and suitable for use at 3000m altitude.
7. Hybrid GIS can be assembled conveniently utilizing standardized modules like circuit breaker, disconnecter, earthing switch, current transformer and bushing etc.
8. GIS is assembled and tested as per transported unit in the factory, which facilitates the connection at construction site with short installation period.



SF₆ H-GIS

MAIN TECHNICAL PARAMETERS

Item		Unit	Technical data	
Rated voltage		kV	800	
Rated current		A	5000,6300	
Rated frequency		Hz	50	
1min. rated power frequency withstand voltage	Phase to earth	kV	960	
	Across open contacts		960(+460)	
Rated lightning impulse withstand voltage peak value	Phase to earth	kV	2100	
	Across open contacts		2100(+650)	
Rated switching impulse withstand voltage peak value	Phase to earth	kV	1550	
	Across open contacts		1300(+650)	
Rated short circuit breaking current		kA	50,63	
Rated short circuit making current		kA	135,171	
Rated short time withstand current and duration time		kA/s	50/3,63/2	
Rated peak withstand current		kA	135,171	
Radio interference voltage		μ V	500	
SF ₆ gas pressure (at 20℃ gauge pressure)	CB gas compartment	MPa	0.6	
	Other gas compartments		0.4,0.5	
SF ₆ gas leakage rate for each gas compartment		%/year	0.5	
SF ₆ gas humidity	Gas compartment with arcing decomposer	Acceptance value	μ L/L	150
		Permissible value for long time operation		300
	Gas compartment without arcing decomposer	Acceptance value		250
		Permissible value for long time operation		500
Circuit breaker operating mechanism			Spring hydraulic operating mechanism	
Disconnecter operating mechanism			Motor operating mechanism	
Earthing switch operating mechanism			Motor operating mechanism	
Fast earthing switch operating mechanism			Motor spring operating mechanism	
Applicable standards			GB、DL、IEC	

Note: special orders can be made if customer's requirement exceeds above-mentioned technical data.