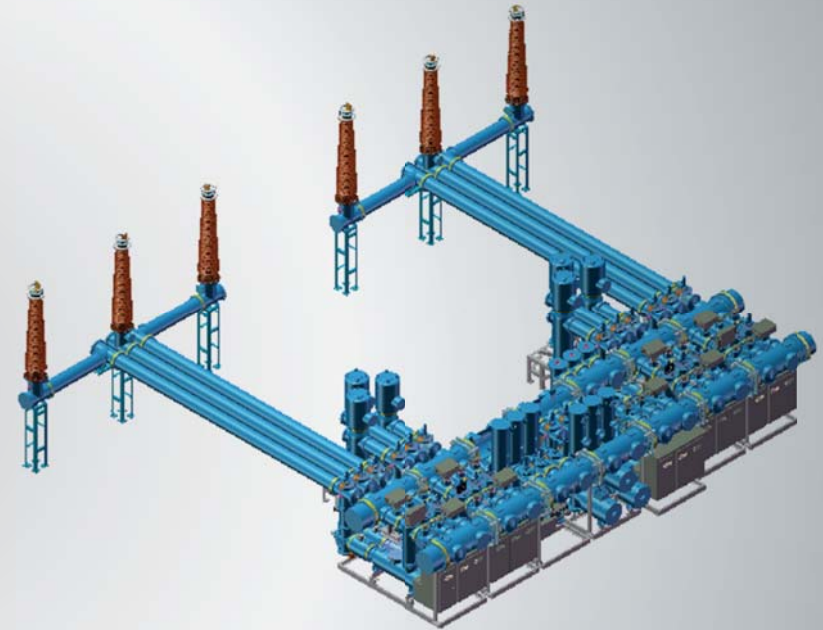


ZFW20

252

INTRODUCTION

Type ZFW20-252 GIS is a new generation product with rated voltage 252kV, continuous current 3150~4000A and rated shorted circuit breaking current 50kA based on the original 252kV GIS technology, and is compact, modular, with short installation period, easy for maintenance, high reliability, very long maintenance cycle, etc. It is generally used for the power network, power plant, large-scale mining enterprise substations, railway substations and others.



Users' benefits

- Smaller occupation requirement
- Higher reliability
- Convenient and quick installation
- Easy maintenance

Through the assembly of different combination of functional modules, type ZFW20-252 GIS can achieve single busbar, double busbar, single busbar with section and double busbar with section, and other connection schemes. It is suitable for both indoor and outdoor application.

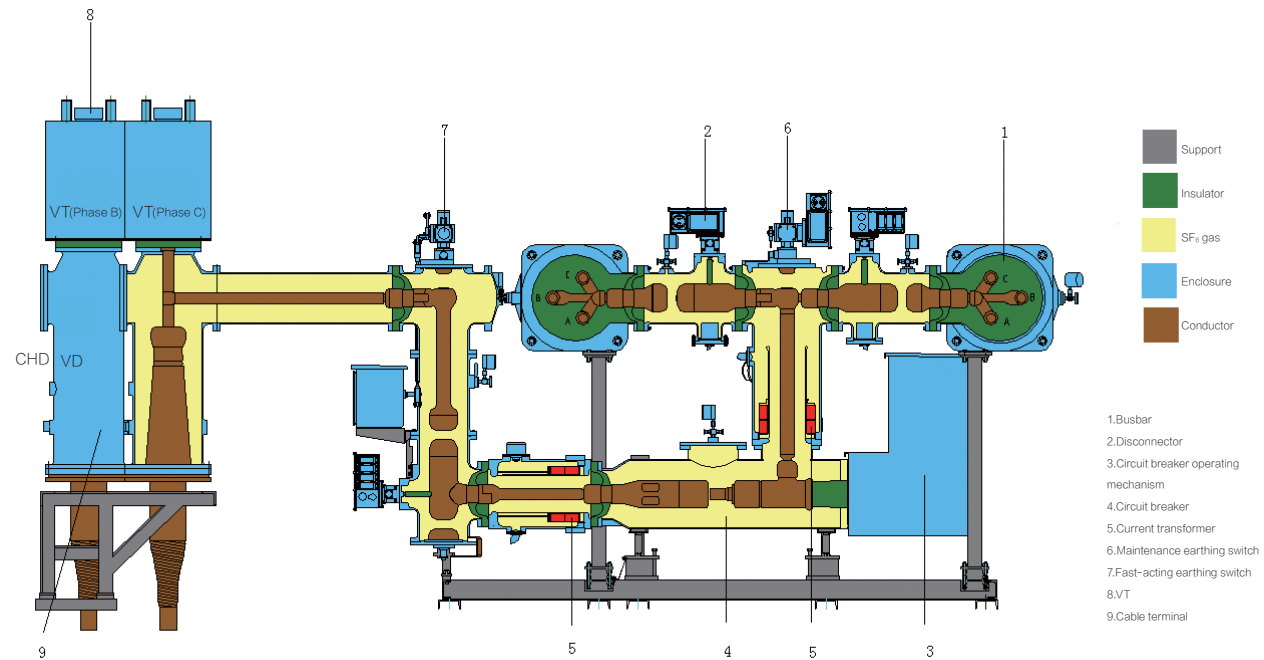
ZFW20

252

OVERALL STRUCTURE

In general, type ZFW20-252 GIS consists of circuit breaker, disconnector, main busbar, earthing switch, three working-position disconnector with earthing switch, current transformer, voltage transformer, surge arrester, SF₆ air bushing, cable terminal, oil/SF₆ gas bushing, local control cabinet, etc. The main busbar is with three phase in one common enclosure (rated current: 3150A and 4000A) or single phase enclosure (rated current: 5000A). The rest components are with isolated phase enclosure made of aluminum alloy. The intelligent components can be set by user's requirements.

Standard bay width is 1800mm. All the components of standard bay are mounted on hot dip galvanized steel support structure, to be tested in the factory and transported as one unit to site for easy installation.



Sectional view of double busbar cable incoming/outgoing feeder bay

ZFW20

252

MAIN TECHNICAL PARAMETERS

Item		Unit	Technical data
Rated voltage		kV	252
Rated current		A	3150,4000,5000
Rated frequency		Hz	50
Rated power frequency withstand voltage 1 min	Phase to earth	kV	460
	Across open contacts		460(+145)
Rated lightning impulse withstand voltage peak	Phase to earth	kV	1050
	Across open contacts		1050(+200)
Rated short circuit breaking current		kA	50
Rated short circuit making current		kA	125
Rated short time withstand current and duration time		kA/s	50/3
Rated peak withstand current		kA	125
Radio interference voltage		μ V	500
SF ₆ gas pressure (at 20℃ gauge pressure)	CB gas compartment	MPa	0.6
	Other gas compartments		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	150
		Permissible value for long time operation	300
	Gas compartment without arcing decomposer	Acceptance value	250
		Permissible value for long time operation	500
CB operating mechanism			Spring operating mechanism
DS operating mechanism			Motor operating mechanism
ES operating mechanism			Motor operating mechanism
FES 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.

INTRODUCTION

Type ZFW20B-252 GIS is a new generation product with rated voltage 252kV, continuous current 3150~4000A and rated shorted circuit breaking current 50kA based on the original 252kV GIS technology, and is compact, modular, with short installation period, easy for maintenance, high reliability, very long maintenance cycle, etc. It is generally used for the power network, power plant, large-scale mining enterprise substations, railway substations and others.

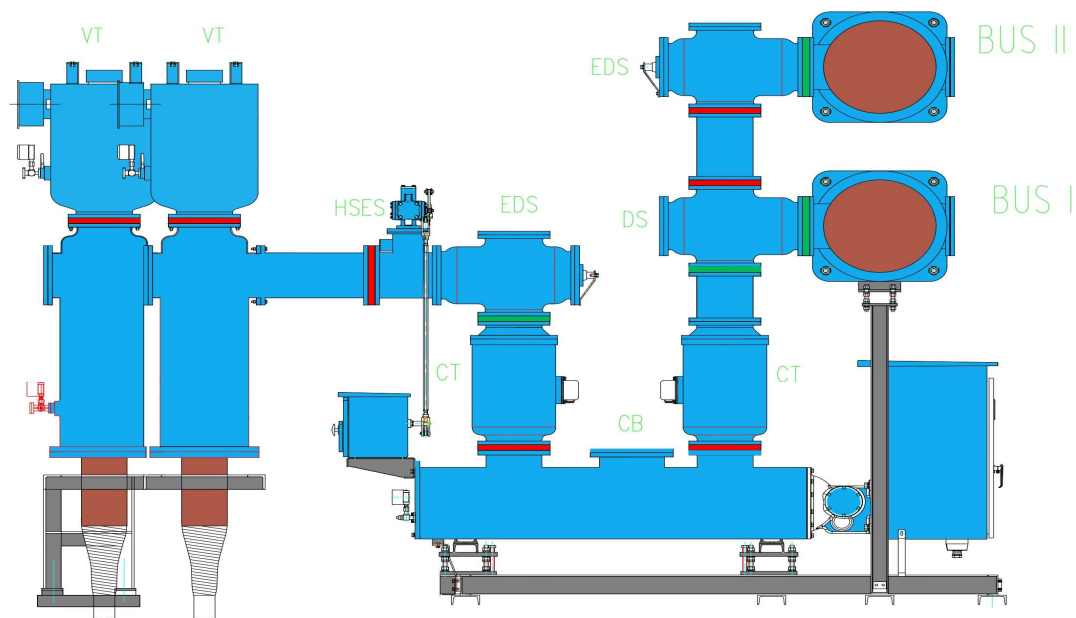


ZFW20B

252

OVERALL STRUCTURE

In general, type ZFW20B-252 GIS consists of circuit breaker, disconnector, main busbar, earthing switch, three working-position disconnector with earthing switch, current transformer, voltage transformer, surge arrester, SF₆, air bushing, cable terminal, oil/SF₆ gas bushing, local control cabinet, etc. The disconnector, disconnector+earthing switch, main busbar is with three phase in one common enclosure (rated current: 3150A and 4000A) or single-phase enclosure (rated current: 5000A). The rest components are with isolated phase enclosure made of aluminum alloy. The intelligent components can be set by user's requirements. Standard bay width is 1800mm. All the components of standard bay are mounted on hot dip galvanized steel support structure, to be tested in the factory and transported as one unit to site for easy installation.



ZFW20B

252

Item		Unit	Technical data
Rated voltage		kV	252
Rated current		A	3150,4000,5000
Rated frequency		Hz	50
Rated power frequency withstand voltage 1 min	Phase to earth	kV	460
	Across open contacts		460(+145)
Rated lightning impulse withstand voltage peak	Phase to earth	kV	1050
	Across open contacts		1050(+200)
Rated short circuit breaking current		kA	50
Rated short circuit making current		kA	125
Rated short time withstand current and duration time		kA/s	50/3
Rated peak withstand current		kA	125
Radio interference voltage		μV	500
SF6 gas pressure (at 20° C gauge pressure)	CB gas compartment	MPa	0.6
	Other gas compartments		0.5
SF6 gas leakage rate for each gas compartment		%/year	0.5
SF6 gas humidity	Gas compartment with arcing decomposer	Acceptance value	150
		Permissible value for long time operation	300
	Gas compartment without arcing decomposer	Acceptance value	250
		Permissible value for long time operation	500
CB operating mechanism			Spring operating mechanism
DS operating mechanism			Motor operating mechanism
ES operating mechanism			Motor operating mechanism
FES operating mechanism			Motor spring operating mechanism
Applicable standards			GB, DL, IEC