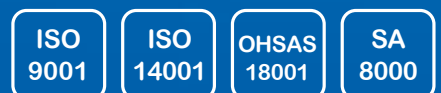


Leading Solution & Customer Value

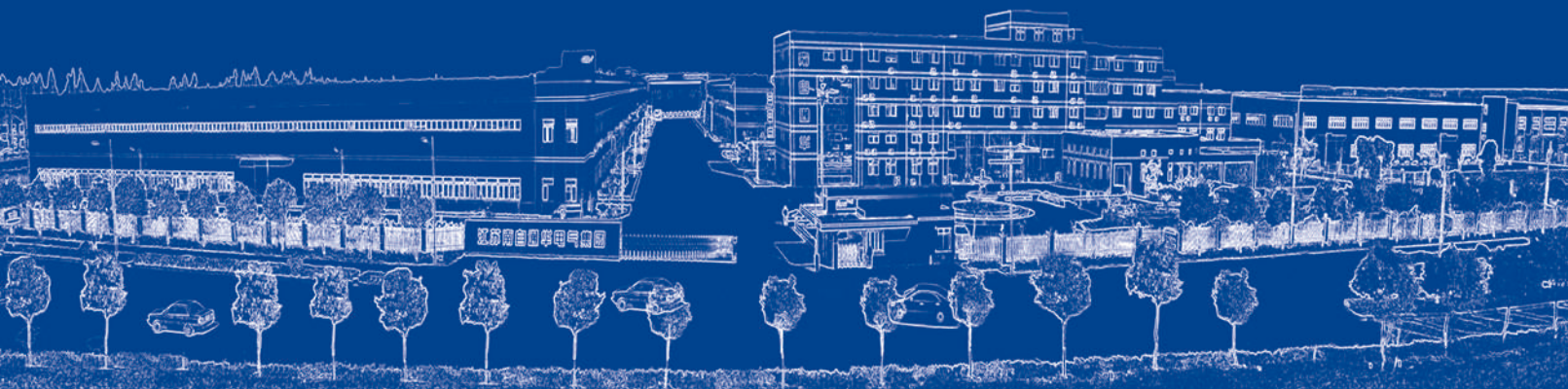
WETOWN

Medium & High Voltage Busway System



WETOWN BUSWAY

WETOWN BUSWAY CO., LTD. is a leading busway company in China. It boasts the most complete lines of busway product & solution in the industry and modern manufacturing facility with state-of-art manufacturing equipment and process. The company complies with quality management system ISO 9001, Environment Management System ISO14001 and Occupational Health & Safety Management System OHSAS18001. The products made by WETOWN have obtained over 30 national and international patents and passed the type tests of international authority including CCC, KEMA, UL, and CE etc. All these strength together with our strong market position and financial status have allowed us to become the No. 1 national brand of busway. With long history and rich experience in product design, manufacturing expertise as well as proven quality of thousands of installations through out China and the rest of world, Wetown is striving to become a global leading manufacturer in busway system by helping customer to solve problems with innovative and efficient solutions.



Mission

**WETOWN BUSWAY,
ENGINE of BUSWAY TOWN**

Making Electrical Transmission & Distribution

More Reliable, More Efficient and More Economical



Culture and value

WETOWN BUSWAY

Currently No.1 China National Brand in Busway

Striving to be a leading global expert with full solution

Our culture and value

Integrity & Commitment

Commitment to society, customer and our people

Customer Orientation

It is the first priority among everything we do.

Seeking to be your first choice partner by excellence.



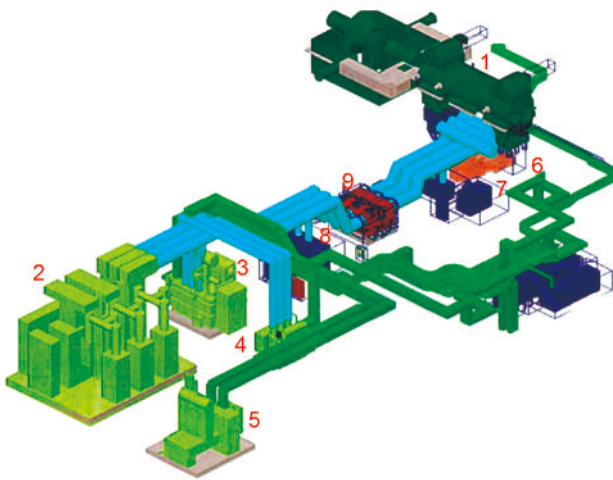


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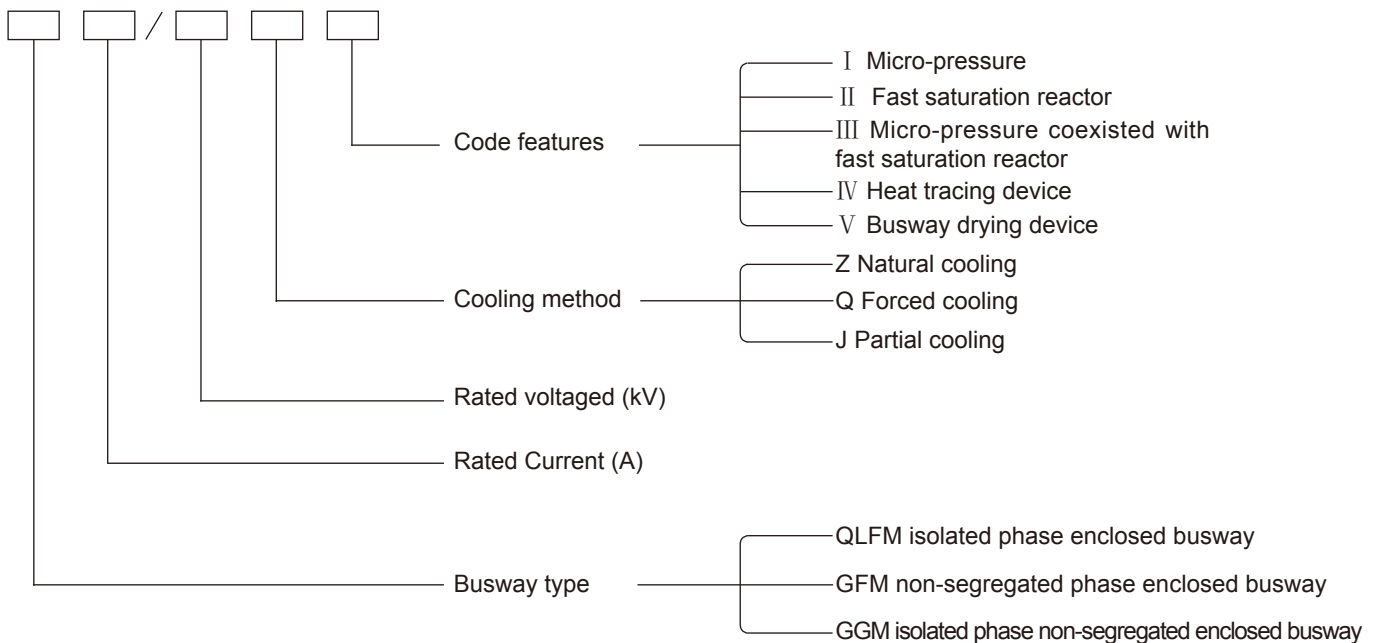
Medium Voltage Enclosed Bus duct System

System Diagram



1. Generator
2. Main transformer
3. Plant transformer
4. Excitation transformer
5. Starting (spare) transformer
6. Generator out-going cabinet
7. Neutral cabinet
8. PT-LA cabinet
9. Generator breaker

Product Type and Definition



QLFM series Isolated Phase Bus

Application

Isolated phase enclosed bus duct is a kind of high-current transmission device which is extensively applied in generator main lead-out wire loop and power station Service/auxiliary Transformers.



Main circuit



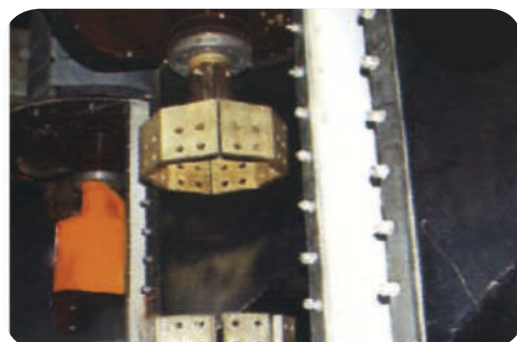
Main transformer connection



Auxiliary transformer connection



Station Auxiliary circuit

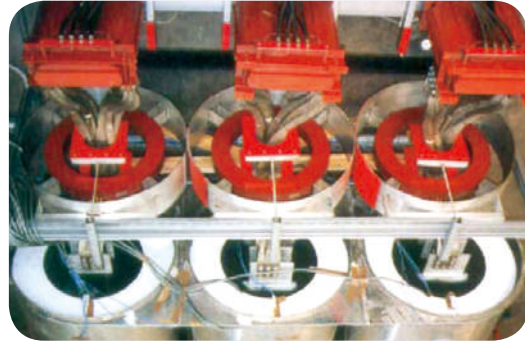


Generator connection

QLFM series Isolated Phase Bus



Excitation transformer connection



CT assembly structure



Wall-through seal and expansion joint structure



Removable expansion joint structure



PT-LA cabinet connection

QLFM series Isolated Phase Bus

Feature

Aluminum Construction and Insulator Support

Both the enclosure and all the conductor of isolated phase enclosed bus duct are all welded by aluminum plate, providing high conductivity, corrosion-free operation. The conductor is supported by tripost insulator and the pressure is evenly applied on the insulators with more stability being ensured.

Contamination Protection

Bus system can be effectively prevented from the grounding fault caused by moisture, dust and external factors under the protection of enclosure. Short-circuit will be avoided between phases because of isolated phase enclosed structure.

Conical insulator is adopted as contamination barrier when necessary, e.g. bus connection and device interface with IP protection up to IP54 and above, and so bus duct can run safely and steadily by means of micro-positive pressure without the impact by moisture, dust and condensation on insulator.

Low Heat Loss and Temperature Rise

The metal housings are electrically connected so that induced current, nearly of the magnitude of the phase current, can flow through the housing, in the opposite direction from the phase current. The magnetic field produced by this current nearly exactly offset the magnetic field produced by the phase current, so there is almost no external magnetic field produced. As a result nearly no heat loss or temperature rise will occur with the steel structure or reinforced concrete around the busduct system.

Earthing Ground

The enclosure of IPB which connected along the length are in the same phase (including each branch circuit). The enclosures of each phase are connected by short-circuit boards at the terminal of bus duct so that the external housings of the conductors remain at equal potential.

Expansion Joint

When the length of bus duct reaches between twenty and thirty meters , expansion joint can be set up in the basic settlement department. Thus, the bus duct can be adjusted horizontally or vertically to offset thermal expansion of the bus duct and errors caused by basic settlement.

Electrical Isolation and Termination

At the joint of the equipment, insulating rubber bellows are applied at the enclosure for electrical isolation and avoid the impact of induced current.

The conductors inside are all connected with flexible braided straps to eliminate the vibration of connected equipment.

Metering and Protection

Current transformer can be set up according to the requirement for the purpose of measurement and protection.

QLFM Series Isolated Phase Bus

The Diagram of Bus Duct

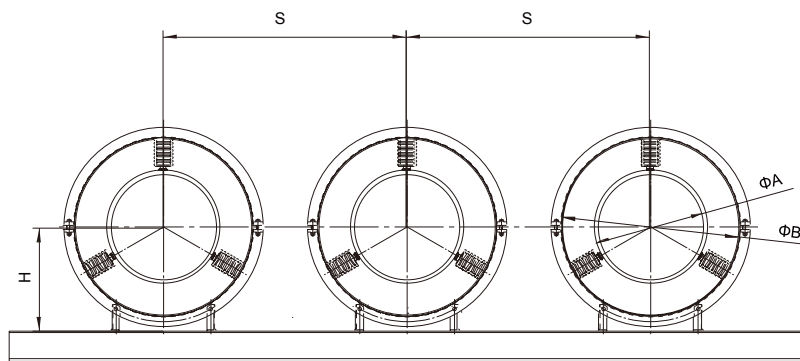


Fig 5-1

Main Technical Parameter and Dimension

Table 5-1

Rated voltage (KV)	Rated current (A)	BIL(KV)	Dimensions (mm)				Weight Kg/m
			Enclosure $\varnothing B$	Conductor $\varnothing A$	Distance between phases S	Height H	
Less than 24	Less than 2000	75/150	$\varnothing 650$	$\varnothing 150$	≥ 900	490	213
Less than 24	Less than 2500	75/150	$\varnothing 700$	$\varnothing 150$	≥ 950	515	222
Less than 24	Less than 4500	75/150	$\varnothing 750$	$\varnothing 200$	≥ 1000	540	252
Less than 24	5000-8000	75/150	$\varnothing 750$	$\varnothing 300$	≥ 1000	540	283
Less than 24	8000-9000	75/150	$\varnothing 850$	$\varnothing 350$	≥ 1100	590	316
Less than 24	9000-10000	75/150	$\varnothing 900$	$\varnothing 400$	≥ 1150	615	367
Less than 24	10000-14000	75/150	$\varnothing 1050$	$\varnothing 500$	≥ 1300	690	480
Less than 24	20000-24000	75/150	$\varnothing 1450$	$\varnothing 900$	≥ 1800	890	845
Less than 24	24000-26000	75/150	$\varnothing 1500$	$\varnothing 950$	≥ 1900	915	890
Less than 35	27000-30000	100/185	$\varnothing 1650$	$\varnothing 1000$	≥ 2000	990	980

QLFM Series Isolated Phase Bus

QLFM Series Isolated Phase Bus Accessories

PT-LA Cabinet

Reliable construction and ease of operation: the cabinet is of draw-out type structure. The compartments are constructed without being accessible during operation. In open position, the primary and secondary contacts of the transformer are disconnected with the primary terminal grounded.



Neutral Grounding Cubicles

The optimized design of structure gives the improved capacity of preventing disturbance, with the features of reduced weight, ease of installation and operation.



QLFM Series Isolated Phase Bus

Application of Isolated Phase Bus Duct



Supply Scope

Equipments and spare parts will be provided with the requirements of consumers as follows:

- Isolated phase bus duct: it starts from the generator terminal and then the main lead out bus duct circuit at the low-voltage side of the transformer; branch circuit from main circuit to Station Service/Auxiliary Transformers, excitation transformer, PT, arrester cabinet, excitation cabinet, Load Switchgear and so on.
- Subordinate equipment cabinets, such as PT cabinet, arrester cabinet, load switchgear and so on.
- Current transformer.
- Hydrogen gas detection device.
- Intelligent micro-pressure device, device of maintaining hot or drying air, heaters, dehumidification device with silica respirator, etc..
- On-line, portable infrared TME, Platinum resistance TME.
- Galvanized steel construction install.
- Argon arc welding machine, welding stick, etc..
- Air-cooled device.

GFM Series Non-segregated Phase Bus Duct

Purpose

GFM Series non-segregated phase bus duct is suitable for transmission system of 3.6~40.5Kv, rated current from 1000 to 6800A, AC 50~60 Hz, which is mostly applied in:

- The electrical connection between generator and transformer;
- The electrical connection between transformer and high-voltage distribution cabinet;
- The electrical connection of AC excitator and rectifier cabinet;
- The electrical connection of the excitation switchgear and generator rotor ring;
- The electrical connection between other high-voltage main circuits.



The application of non-segregated bus duct in power station



The application of non-segregated bus in start up and standby circuit

GFM Series Non-segregated Phase Bus Duct

Features

Housing Design

GFM series bus duct provides consistent strength and high short-circuit ratings. Under the protection of the enclosure made of aluminum or low magnetic plate, no hysteresis loss occurs on the distribution system with low temperature rise on housing, reduce energy loss on the whole system.

The hole for installation or maintenance can be set up at top or bottom of GFM, ventilated shutter can be set up on both side and bottom of the enclosure to improve heat dissipation.

Expansion joint

When the length of bus duct reaches between twenty and thirty meters , expansion joint can be set up in the basic settlement department. Thus, the bus duct can be adjusted horizontally or vertically to offset thermal expansion of the bus duct and errors caused by basic settlement.

Connection of equipment

Flexible braided straps are applied to eliminate the vibration of connected equipment. Rubber gaskets are adopted as shock absorber in the system to provide the elastic support to the insulator and the conductor. Moreover, the shock absorber can avoid the machinery vibration caused by equipment and the damage caused by earthquake.

Painting on enclosure

Enclosure are painted with light grey painting in a very durable finish on the external surface with minimum absorption of visible light for better heat dissipation. Black painting on the internal surface would reinforce radiation and prevent the corona at the same time.

Condensation

In winter, segregation device can be applied in the wall to avoid condensation happened due to temperature variation between indoor and outdoor in winter.

Highly Durable Silver-Plating

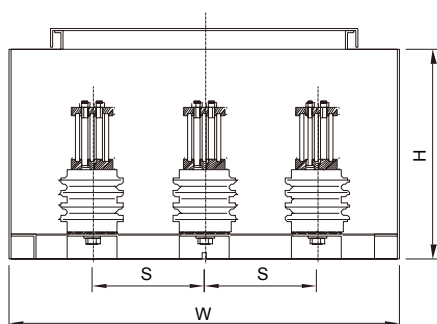
Silver-plating is applied to all joint and connection area. Silver-plating provides an extremely durable contact surface with better performance of lower contact resistance and anti-corrosion.

Temperature monitoring system

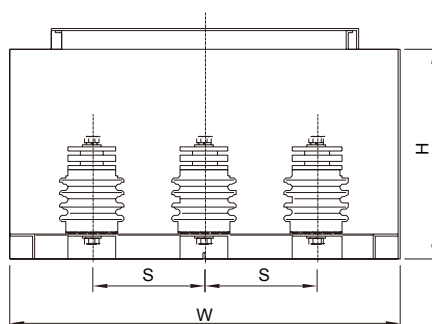
Observation window can be installed in the connection area of bus duct and transformer cabinet and generator cabinet, distribution cabinet so as to monitor the temperature rise by means of temperature measurement device or online intelligent monitoring system, which greatly improve the level of safety and reliability of operation and maintenance.

GFM Series Non-segregated Phase Bus Duct

Main Technical Parameters



I
Fig 10-1



II
Fig 10-2

Table 10-1

Specification standards		IEC364-5-54/GB/T8349-2000/JB/T9639-1999			
Ambient	°C	-40~+40			
Relative humidity		Daily averages ≤95%. Monthly average ≤90%			
IP		IP40, IP54			
Rated voltage	kV	3.15	6.3	10.5	35
Max operating voltage	kV	3.6	7.2	12	40.5
Insulation level	kV	25/40	32/60	42/75	100/185
Rated frequency	Hz	50(60)			
Rated operating current		Dimension (W×H)(mm×mm)			
1000-3000	A	I 750×400	I 900×560	I 900×560	I 1500×920
		II 850×350	II 1060×460	II 1060×460	II 1800×880
3500	A	I 750×440	I 900×560	I 900×560	
		II 850×480	II 1060×460	II 1060×460	
4000	A	I 750×440	I 900×560	I 900×560	
		II 850×480	II 1060×460	II 1060×460	
4500	A	I 750×440	I 1000×560	I 1000×560	
5000	A	I 1350×500	I 1500×600	I 1500×600	
6300-6800	A	I 1350×500	I 1500×600	I 1500×600	

Note: groove conductor can be applied in the NPB over 4000A.

GFM Series Non-segregated Phase Bus Duct

Bus Duct Diagram for Installation

LV busway provides a stable and efficient power transmission, with a high short-circuit withstand capability.

LV busway has been certified by KEMA to be in compliance with IEC60439-1 and-2 short circuit withstand test for 1 second.

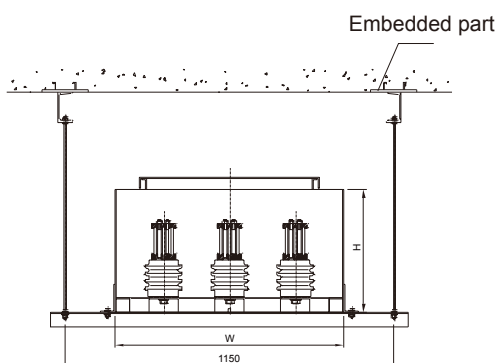


Fig 11-1

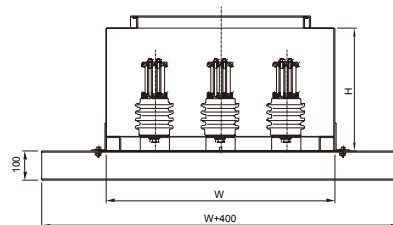


Fig 11-2

Excitation Non-segregated Phase Bus Duct of AC, DC

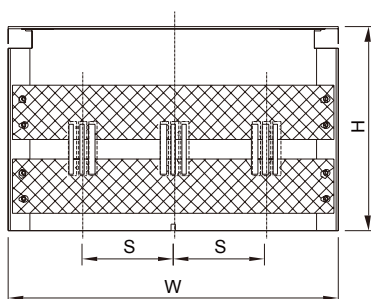


Fig 11-3

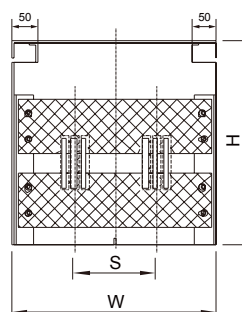


Fig 11-4

Table 11-1

Rated voltage (V)	380		1000		1500	
Rated power frequency withstand voltage (kV)	2.5		4.2		5.4	
Rated current (A)	Dimension (W×H)(mm×mm)					
	Cu electrical conductor	Al electrical conductor	Cu electrical conductor	Al electrical conductor	Cu electrical conductor	Al electrical conductor
Ac excitation (I)	400-2250	550×400	650×400	650×400	700×400	700×400
	2500-3250	550×400	650×400	750×400	700×400	800×400
	3500-6300	650×400	750×400	750×400	800×400	800×400
	5000-6300	700×500	700×500	800×500	800×500	900×500
DC excitation (II)	400-2250	450×400	550×400	550×400	500×400	500×400
	2500-3250	450×400	550×400	600×400	500×400	650×400
	3500-6300	500×400	500×400	600×400	650×400	650×400
	5000-6300	600×500	600×500	700×500	700×500	800×500

Note: 1. The standard and dimension in the form above are the standard offer by the company.

2. We can provide special design per customers' requirement.

Insulated Pipe Busway

Overview

With the increased capacity of the main transformer in the substation, the rated current of power connection for 10 kV and 35 kV transformers increases accordingly. Multiple rectangular conductors, commonly adopted in the previous works, are no longer suitable for large current loops. Further more, from technical and structural perspective, it is difficult for rectangular bus bar to solve the heating problem and to meet electric power requirements, thus leading to additional loss, increased coefficient of skin-effect, and causing a decline in current carrying capacity.



By the new product of pipe bus duct, the above mentioned problems can be resolved properly, with increased span of busway length, and reduced consumption of land. Insulated composite shielding is adopted to improve the utilization of materials and enhance mechanical strength. By new technology of semi-insulation and full-insulation can guarantee the personal safety and reliable operation on the system without the issue of short circuits caused by metal objects falling on the system. Insulated pipe busway has been widely used in developed countries. It is also a new trend in China with many successful applications in Guangdong, Guangxi, Jiangsu, Beijing, Tianjin, Shandong, Hunan, Jiangxi, Shanxi and other places. With the features of safe operation in the substation, improved reliability in power supply, reduced losses in power transmission & distribution, it is a more efficient and economical solution for customers.

Application

Power plant: the busway connection from the machine set to the transformer.

Transformer substation: the connection from transformer to the busway of the high voltage room and the connection of the busway between the high voltage devices.



Application example 1 of the insulated tubular busway in the transformer substation



Application example 2 of the insulated tubular busway in the transformer substation

Insulated Pipe Busway

Features

The feature of Insulated pipe busway:

Capacity for High Current Transmission and Distribution

Insulated pipe busway is tubular conductor with more capacity to handle large current. Therefore, the insulated busway is particularly suitable for high operating current circuit.

Low Skin Effect & Low Power Loss

Insulation pipe busway's skin effect coefficient is low, $K_f \leq 1$, and AC resistance is small, therefore the power loss of the busway is small. When the multiple pieces of rectangular conductor being adopted, the effective carrying capacity per unit cross-section will be decreased with the increasing of the skin effect coefficient. The current distribution through multiple pieces of bus bar will be uneven, additional loss will increase and the dissipation is not good.

Good Dissipation & Low Temperature Rise

Insulation pipe busway is tubular conductor. The inside diameter air channel can form hot air convection naturally with good dissipation (the pressure difference between indoor and outdoor can form hot air convection naturally).

High Allowable Stress $[\sigma]$ and Mechanical Strength

Insulated pipe busway's allowance stress is 4 times of the rectangular busway's allowance stress which can withstand high short-circuit current and high mechanical strength, resulting in increased support span of busway. Under the case of 50KA short circuit current, $\Phi 100 \times 5$ mm insulated busway's suspended span reaches 9 meters which is good for the support bracket of the busway. The span of the busway can be reach 13 meters. Due to large suspension span, the busway can access to the high voltage room directly to connect with the indoor current-limiting reactor or the 10KV switchgear, reducing the corresponding supporting insulator, busway fittings as well as the basis of the civil engineering support.



High Dielectric Strength

The insulated pipe busway has the features of high dielectric strength by adopting sealed & shielding insulation and the electrical potential of the earthing is zero. The electrical shield possesses the following features: a. making the electric field evenly distributed; b. controlling the electric potential and limiting the electric field; c. avoiding the partial discharge which come from the insulator surface; d. conducting the leakage current and the charging current; e. protection from the dangerous voltage.

Insulation Material with High Heat-resistance Factor

The main insulation material of insulation pipe busway is PTEE, which can work within $-250^{\circ}\text{C} \sim +250^{\circ}\text{C}$ environment. It owns good electrical specification and chemical stability, low mediator loss, flame retardant, anti-aging and the life span over 40 years.

High Capacity for Anti-vibration

Fixing the insulation pipe busway to the steel framework or concrete support directly, and then removing the wall-through casing pipe and supporting insulator, it owns strong capacity of anti-vibration.

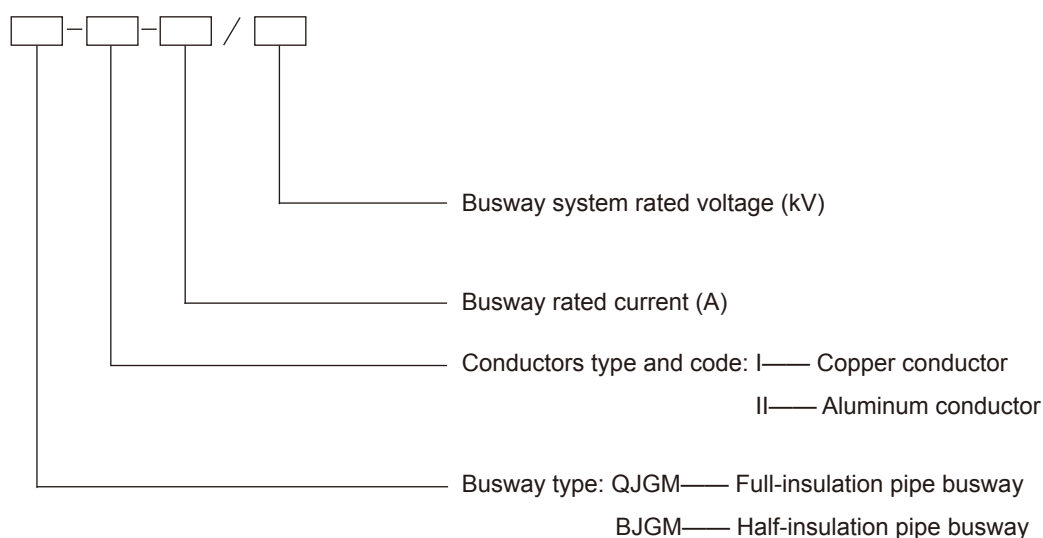
High Reliability and Capacity to Resist External Interference

The every phase of insulation pipe busway uses closure shield insulation, there is no condensation inside the busway, and eliminates the humidity, dust caused by outside condition and the fault which caused by grounding and short-circuit between phases. The busway can run with high reliability.

Insulated Pipe Busway

Main Technical Parameter

Product Type and Definition



Technical Parameter

1. BJGM Half-insulation Pipe Busway Parts

10kV Half-insulation Pipe Busway Technical Parameter

Table 14-1

Specification	Rated current	Conductor specification	Rated peak withstand (KA)	Rated short time withstand current I _{cw} (4s) kA	Temperature rise K	IP level
BJGM- I -1600A/10kV	1600A	φ60×5	125	50	<65	IP54
BJGM- I -2000A/10kV	2000A	φ60×8	125	50	<65	IP54
BJGM- I -2500A/10kV	2500A	φ80×8	125	50	<65	IP54
BJGM- I -3150A/10kV	3150A	φ80×10	125	50	<65	IP54
BJGM- I -4000A/10kV	4000A	φ100×8	125	50	<65	IP54
BJGM- I -5000A/10kV	5000A	φ100×10	160	63	<65	IP54
BJGM- I -6300A/10kV	6300A	φ120×10	160	63	<65	IP54
BJGM- II -1600A/10kV	1600A	φ80×8	125	50	<65	IP54
BJGM- II -2000A/10kV	2000A	φ80×10	125	50	<65	IP54
BJGM- II -2500A/10kV	2500A	φ100×8	125	50	<65	IP54
BJGM- II -3150A/10kV	3150A	φ100×10	125	50	<65	IP54
BJGM- II -4000A/10kV	4000A	φ120×10	125	50	<65	IP54
BJGM- II -5000A/10kV	5000A	φ140×10	160	63	<65	IP54
BJGM- II -6300A/10kV	6300A	φ150×10	160	63	<65	IP54

Insulated Pipe Busway

35Kv Half-insulation Pipe Busway Technical Parameter

Table 15-1

Specification	Rated current	Conductor specification	Rated peak withstand (KA)	Rated short time withstand current I _{cw} (4s) kA	Temperature rise K	IP level
BJGM- I -1600A/10kV	1600A	φ60×5	125	50	<65	IP54
BJGM- I -2000A/10kV	2000A	φ60×8	125	50	<65	IP54
BJGM- I -2500A/10kV	2500A	φ80×8	125	50	<65	IP54
BJGM- II -1600A/10kV	1600A	φ80×8	125	50	<65	IP54
BJGM- II -2000A/10kV	2000A	φ80×10	125	50	<65	IP54
BJGM- II -2500A/10kV	2500A	φ100×8	125	50	<65	IP54

2. QJGM Whole-insulation Pipe Busway Parts

10Kv Full-insulation Pipe Busway Technical Parameter

Table 15-2

Specification	Rated current	Conductor specification	Rated peak withstand (KA)	Rated short time withstand current I _{cw} (4s) kA	Temperature rise K	IP level
QJGM- I -1600A/10kV	1600A	φ60×5	125	50	<65	IP54
QJGM- I -2000A/10kV	2000A	φ60×8	125	50	<65	IP54
QJGM- I -2500A/10kV	2500A	φ80×8	125	50	<65	IP54
QJGM- I -3150A/10kV	3150A	φ80×10	125	50	<65	IP54
QJGM- I -4000A/10kV	4000A	φ100×8	125	50	<65	IP54
QJGM- I -5000A/10kV	5000A	φ100×10	160	63	<65	IP54
QJGM- I -6300A/10kV	6300A	φ120×10	160	63	<65	IP54
QJGM- II -1600A/10kV	1600A	φ80×8	125	50	<65	IP54
QJGM- II -2000A/10kV	2000A	φ80×10	125	50	<65	IP54
QJGM- II -2500A/10kV	2500A	φ100×8	125	50	<65	IP54
QJGM- II -3150A/10kV	3150A	φ100×10	125	50	<65	IP54
QJGM- II -4000A/10kV	4000A	φ120×10	125	50	<65	IP54
QJGM- II -5000A/10kV	5000A	φ140×10	160	63	<65	IP54
QJGM- II -6300A/10kV	6300A	φ150×10	160	63	<65	IP54

35Kv Full-insulation Pipe Busway Technical Parameter

Table 15-3

Specification	Rated current	Conductor specification	Rated peak withstand (KA)	Rated short time withstand current I _{cw} (4s) kA	Temperature rise K	IP level
QJGM- I -1600A/10kV	1600A	φ60×5	125	50	<65	IP54
QJGM- I -2000A/10kV	2000A	φ60×8	125	50	<65	IP54
QJGM- I -2500A/10kV	2500A	φ80×8	125	50	<65	IP54
QJGM- II -1600A/10kV	1600A	φ80×8	125	50	<65	IP54
QJGM- II -2000A/10kV	2000A	φ80×10	125	50	<65	IP54
QJGM- II -2500A/10kV	2500A	φ100×8	125	50	<65	IP54

Gas Insulated Line Bus Duct (GIL)

System Overview

Compared with traditional method cable and overhead line, WT-GIL has the features of high transmission capacity, more flexible with less space consumption, High EM compatibility. The benefit for customer: more safe, reliable and more economical. WETOWN GIL product is suitable for high power transmission system at 126KV to 550KV, rated current up to 5500A. GIL is very flexible and suited for almost any kind of routing, like through built-up areas or road crossings, on marshy ground, under tunnel, and vertical shaft; Less implementation time is required than cable. Key application as below:

GIS As Grid Connections

- Connection between overhead line and transformer;
- Connection of busbar for outdoor substation.

Long Vertical Shafts

- Suitable for transmission of the energy over large vertical distances, especially for Hydroelectric generating stations.

Line Crossing

- Crossing air-insulated bus or overhead line.

Optimize Grid Integration

- With large current carrying capacity, GIL allows the combination of outputs from multiple generator step-up transformers into feeder circuits, with more compact transmission line and GIS arrangements than cable.

Retrofit of Existing Substation

- Upgrade existing facilities, or to replace damaged equipment with new equipments.



Gas Insulated Line Bus Duct (GIL)

System Description of WT-GIL

WETOWN SF6 GIL is suitable for 3-phase, 50 Hz power system, and the bus is assembled by section and fully factory tested. The section is up to 8 meters in length. The elbows is pre-assembled in the factory per requirement, with the changing direction range from 89° to 179°. Other fittings like Tee is available for branch extension and connection with other components, e.g. SF6 arrester and PT.

Each single-phase of GIL consists of a grounded aluminum enclosure tube containing a concentric tubular aluminum alloy conductor arranged in a coaxial configuration. The conductor is supported by epoxy insulators. The system is suitable for the most stringent application environment in steady and reliable operation.

WETOWN GIL has the advantage of low cost in installation, operation and maintenance. The unique design of joint contact provides a low-resistance and efficient current transfer path (lower loss meaning lower operation cost). GIL is easy for maintenance by annual check & inspection on humidity and pressure of SF6, the status of enclosure, supporting base for GIL and fittings. The enclosure is maintenance free internally due to no wearing parts or switches inside. With the robust structure and logical design, WETOWN GIL is intended for power transmission with long life up to 50 years, reliably, safely and economically.

Design Consideration

WETOWN GIL is design in consideration of below criteria:

- Rated System voltage
- Rated Lightning impulse Withstand Voltage (BIL)
- Rated Switching Impulse Withstand Voltage (SIL)
- Power Frequency Withstand Voltage
- Rated operating current
- Rated short circuit current

The lightning impulse requirements (BIL) is the critical design parameter for gas insulated transmission lines. Another key factor is the amperage rating which influences the dimensions of the coaxial system. For a high current transmission system, the current requirements determine the size of the conductor. WT-GIL is a system optimized in considering the dielectric strength, current capacity and material cost.

Gas Insulated Line Bus Duct (GIL)

The Parameters of WETOWN GIL

Table 18-1

Aluminium busway size (mm)	kV	126	252	550
Power Frequency Withstand Voltage (1min)	kV	230	460	680
Lightning Impulse Withstand Voltage	kV	550	1050	1550
Switching Surge Insulation Level	kV	-	-	1175
Frequency	Hz	50	50	50
Open Air Current Rating	A	3150	3150/4000	5000
Open Air Power Loss at Rated Current (per Single-phase Meter)	W	124	150	232
Direct Buried Current Rating	A	1450	1500/1850	2600
Direct Buried Power Loss at Rated Current (per Single-phase Meter)	W	36	39	51
Short Circuit Current (3sec)	kA	40	50/63	80/100
Capacitance (per Single-phase Meter)	Pf	59.5	41.6	54.2
Inductance (per Single-phase Meter)	μ H	0.204	0.268	0.205
Surge Impedance	Ω	72	80	61.2
Enclosure Inside Diameter	mm	508	359	508
Conductor inside Diameter	mm	90	90	180
Weight of GIL without SF6 (per Single-phase Meter)	Kg	47.8	30	47.31
SF6 weight (per Single-phase Meter)	Kg	5.48	2.24	5.72

Application

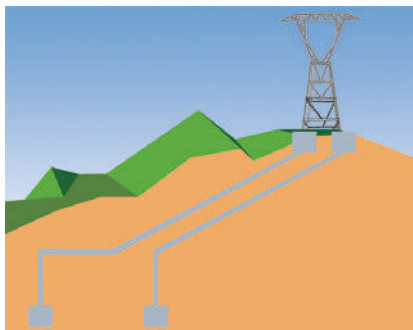
GIL has wide applications with the major installations listed here:

Nuclear & Thermal Power Plant

- Power Plant Optimization
- Flexibility for installation
- High power extension And long distance transmission
- Line crossing
- Under ground transmission

Hydro Power Plan

- Vertical shaft
- Tunnel installation
- GIS retrofit & extension
- Connection for(AIS)



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