

# **Powerful Impact**

**12–24kV SF6-Free LBS Coming Soon!**

# SERIES

THE MOST PROFESSIONAL MANUFACTURER OF APG LBS

**MORE THAN 20 YEARS  
INDUSTRY EXPERIENCE**

**FULL RANGE**

We are one of the most professional developers and manufacturers of indoor APG load break switches in China, with the most complete range of mold models, the richest product styles, and the largest production and sales volume. In the past 10 years, our average annual sales of LBS alone have exceeded 50,000 units, and our products are sold directly or indirectly to nearly 20 countries around the world!

In recent years, we have successfully developed innovative products such as 12kV solid insulated switchgear (SF6-Free SIS); 12kV pure air insulated switchgear (SF6-Free AIS); 24kV compact pure air insulated switchgear (SF6-Free AIS), 24kV solid insulated switchgear (SF6-Free SIS), and pole mounted recloser (SF6-Free), which have been widely recognized by domestic and foreign customers. Recently, the 24kV pole mounted SF6-Free load break switch we developed for foreign customers has been preliminarily completed.

We are not only equipped with complete production equipment and complete experimental equipment, but also have a senior R&D team. Many technical experts have more than 20 years of experience in the industry, which can provide solid technical support for product innovation and development. Our chief engineer is proficient in medium voltage and low voltage, indoor and outdoor products, especially in switches and components, operating mechanisms, molds, machinery, complete sets of equipment, etc. He has profound design, development and manufacturing experience, and has led the development of many popular products in the medium voltage industry.

After years of unremitting efforts, we have grown into an influential expert in the field of customized development of medium-voltage power distribution in China and the global market. Our achievements in the development of SF6-Free medium-voltage switches cannot be underestimated!

# 12-24KV SF6-FREE LBS COMING SOON!

On December 15, 2024, our company solemnly announced the official launch of the development of a new generation of SF6-Free indoor LBS. The last round of parameter demonstration before mold opening has been successfully passed, and the design plan and mold are in progress in an orderly manner. The C cabinet and F cabinet used in the SF6-Free green ring network cabinet have a voltage level of 12kV-24kV. The prototype is expected to be completed and launched around July 2025.

Our development purpose and philosophy is to develop products that are the most cost-effective, can stand the horizontal comparison of similar products, can stand the test of time, and can become the best products of the times. Mainly reflected in the following aspects:

- ◆ The overall cost is significantly lower than similar products on the market! Through repeated demonstrations and comparisons, the most economical and cost-effective solution will be adopted. If common products on the market can meet the requirements, repeated development will be avoided as much as possible (such as using ready-made mechanisms, etc.).
- ◆ The cabinet width is consistent with the traditional SF6 load break switch cabinet, which is conducive to flexible replacement, update and upgrade.
- ◆ Operating habits, workshop assembly, on-site installation, etc. use existing methods and features to the greatest extent possible.
- ◆ The thickness and gas pressure of the gas tank are the same as those of traditional SF6 load switches.
- ◆ The grounding method of the grounding knife is the same as the existing one.

We can provide not only complete cabinets and sets, but also core unit of LBS and accessories. For companies that want to implement localized production abroad, in addition to providing spare parts, we can also provide step-by-step technical support, etc., so that foreign factories can successfully realize their dream of localized manufacturing.

# COMPANY PROFILE

Xiamen Insulation Electrical Technology Co., Ltd. was established in 2013. It initially specialized in the production and sales of medium voltage insulation parts. It has now expanded to the R&D, production and sales of indoor and outdoor medium-voltage distribution products such as load break switches, vacuum circuit breakers, isolating switch, ring main units, prefabricated substations, outdoor reclosers, outdoor load break switches, and intelligent cut out fuses etc. Products are sold to five continents around the world.

We have a senior R&D team, and many technical experts have more than 20 years of industry experience. Our chief engineer is proficient in medium and low voltage, indoor and outdoor products, especially in the design, development and manufacturing of switches and components, operating mechanisms, tool design, machinery, complete sets of equipment, etc., and has led many popular products in the medium voltage industry development.

We have always adhered to independent innovation, creating various core components and overall solutions for customers around the world, embarking on a path of innovation with our own characteristics, and becoming an expert in the field of customized development of medium-voltage power distribution with initial influence at home and abroad.

We were awarded the title of "National High-tech Enterprise" in October 2020, certificate number is GR201735100369, and were awarded the title of "Fujian Province's Technology Little Giant Enterprise" in July 2020, certificate number is 20200220, and were awarded the title of "Xiamen SRDI Enterprises" in June 2018. We own a number of patents and have established joint research and innovation R&D bases with universities such as Xiamen University of Technology.

Our plant has a 15,000 square meter building space and is fully equipped with cutting-edge production machinery. We are completely capable of creating medium-voltage switches, operating mechanisms, core components, and entire sets of equipment in addition to APG insulating materials and silicone parts.

Aside from R&D and manufacturing capabilities, we also have experienced quality inspection, sales and after-sales service teams to ensure that clients obtain high-quality products and services.

We have a range of professional testing equipment, including lightning impulse surge devices, X-ray flaw detectors, power frequency withstand and partial discharge detection equipment, electrical shielding laboratories, high and low temperature cycle equipment, helium mass spectrometers, and high-pressure water testing equipment, universal tensile testing machines, loop resistance testers.

From components to complete cabinets, from parts to full sets, over the years we have accumulated rich and representative experimental data on various products and models. When customers require customization according to the standards of the country where they are located, we already have relevant plans and parameters that can be applied directly, greatly shortening the cycle time of personalized customized new products and ensuring that the products meet the testing standards of the destination country or region.

Whether your project is small or large, European or American, or a specific country's standard, as long as it is a medium-voltage distribution product and project, we will do our best to provide you with the most efficient, economical, and appropriate, cost-effective products and services.



# PRODUCTION EQUIPMENT



Factory Building



Recloser Workshop



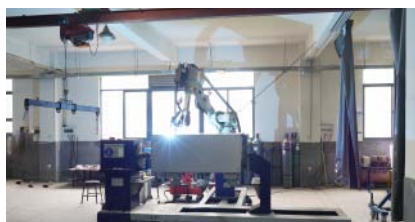
APG Mold Storage Area



Copper Parts Workshop



APG Workshop



Auto Welding Workshop



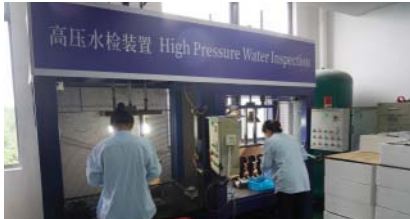
Mechanism Workshop



RMU Assembly Workshop



# TEST EQUIPMENT



High Pressure Water Test



Voltage Withstand & PD Test



Voltage Withstand & PD Test



300kV Impulse Voltage Test



Helium Leak Detector



High & Low Temperature Test



X-Ray Lab



300kV Impulse Voltage Test

# SENIOR PROFESSIONAL TEAM



**LI XUEMIN**

Li Xuemin, chief consultant, is a former senior engineer at the R&D center of China XD Group. He has been working in the electric power industry for more than 40 years. He is one of the few talents in China who has engaged in theoretical research and practical experience of high voltage, medium voltage and low voltage. He has served as chief engineer in many large electrical companies.



**ZHUANG YU**

Zhuang Yu, chief engineer, Li Xuemin's proud apprentice. Systematically learned the theoretical knowledge of low-voltage and medium-voltage electricity, as well as the design, development and manufacturing of switches and components, operating mechanisms, molds, machinery, electrical, complete sets of equipment, etc. He has led the development of many popular products, many of which have become industry classics and imitated by peers. Have deep and unique insights into cutting-edge technologies and industry development trends. Before joining our company, he worked as chief engineer in Xiamen and Wenzhou medium voltage electrical factories. The products involved both medium and low voltage, indoors and outdoors.



**LI ZHUCUI**

Li Zhucui, General Manager, is proficient in the design, development, and manufacturing of medium-voltage insulation products. He is always passionate about new challenges and is keen on researching and cracking non-standard insulation parts with complex structures and difficult processes that large companies are unwilling to take over. Good at analysing and solving problems, focusing on creating high-quality products.





**JUNN LIU**

Liu Jun, Deputy General Manager, is proficient in the design, development and manufacturing of medium-voltage insulation parts, and has been deeply involved in this industry for more than 20 years.



**HU XINLU**

Hu Xinlu, senior technical engineer, has extensive experience in medium voltage power technology and production, mechanical design and manufacturing.



**YANG JINCHENG**

Yang Jincheng, senior technical engineer, has extensive experience in the design, process and production of medium voltage insulation products.

# SENIOR PROFESSIONAL TEAM

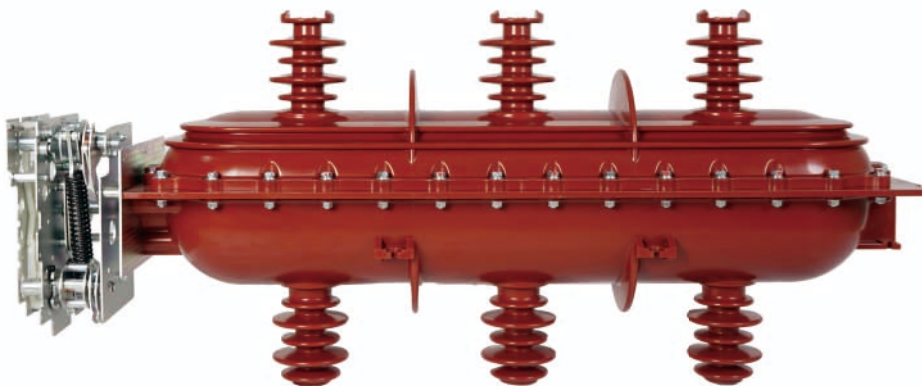
The page features three gear-like graphics. Two are white outlines with green borders, positioned in the upper left. A third is a solid green gear, partially visible on the left edge. A fourth solid green gear is at the bottom right, partially cut off.

# **BOLD TO TRY BE THE FIRST TO TAKE THE RISK!**

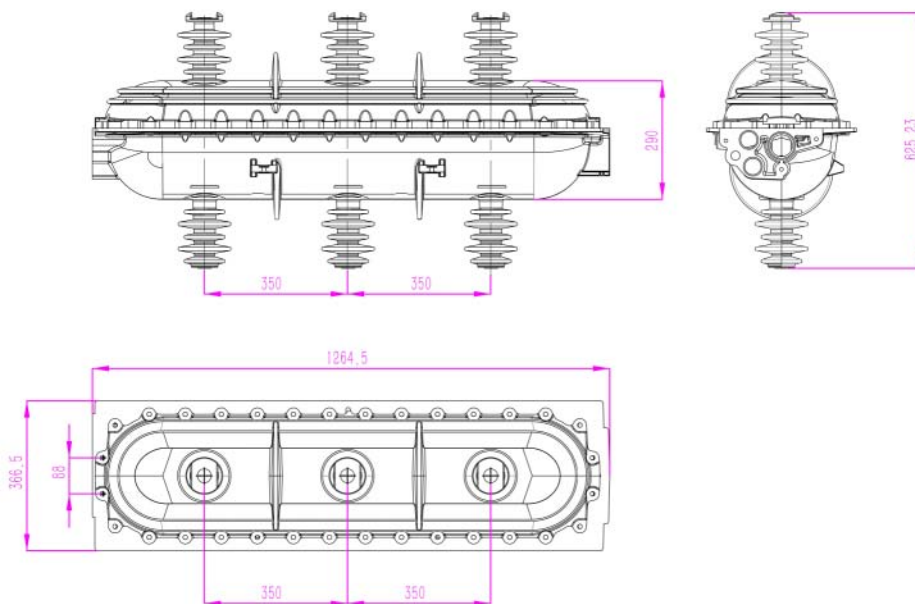
In August 2015, based on the prototype brought back by the customer from Europe, we successfully developed the Indoor SF6 Switch-Disconnecter FLRN36 Load Break Switch.

At that time, the customer negotiated with many factories in China to develop it. Because the APG insulator shell was so large and the process was difficult, many factories did not dare to open the mold. After evaluation, our company felt that we were more confident, so we took over the development task and opened the mold for the first time. It was a great success, and all parameters met or exceeded the customer's standards.

Now this 40.5kV LBS has become a business card of our company, and its products are exported to all over the world.

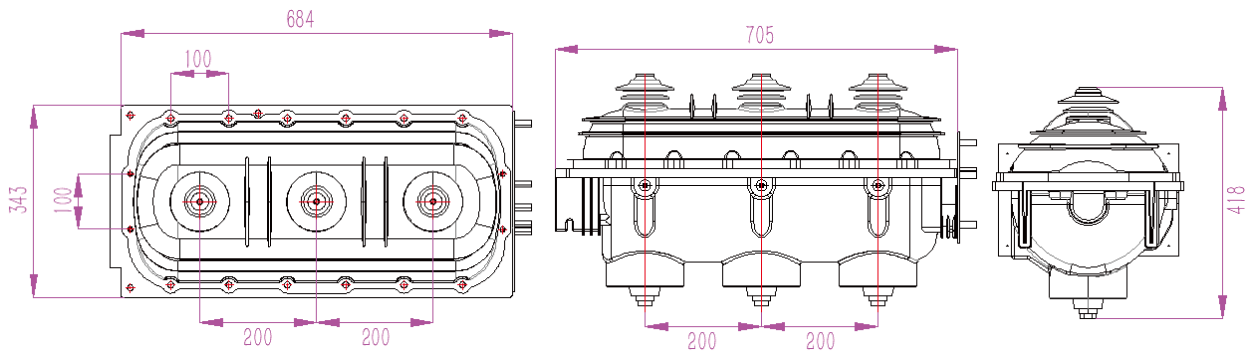


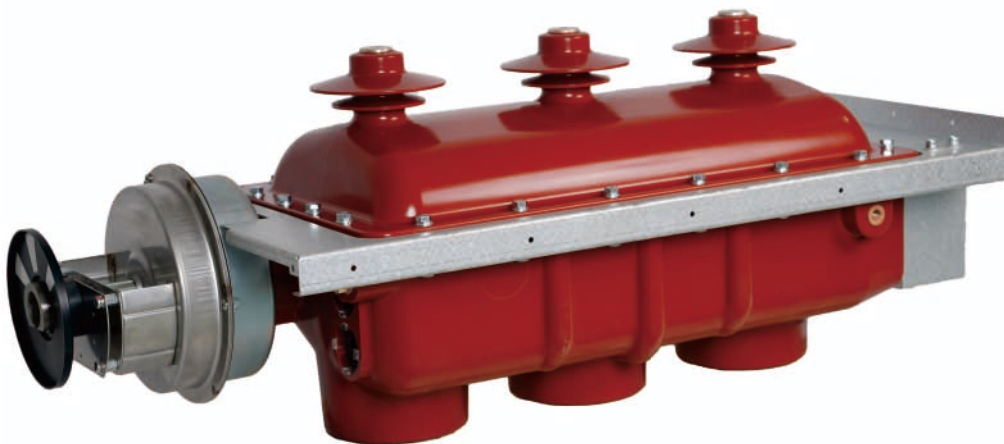
**36kV 630A/1250A 350mm**



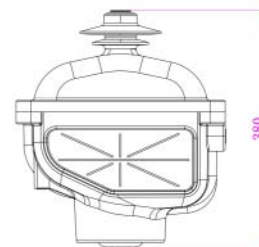
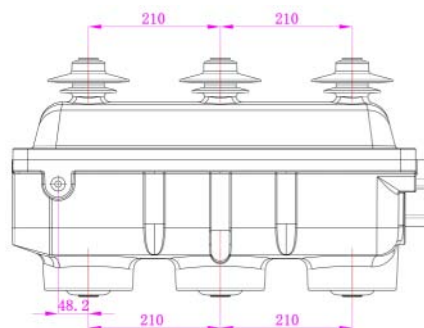
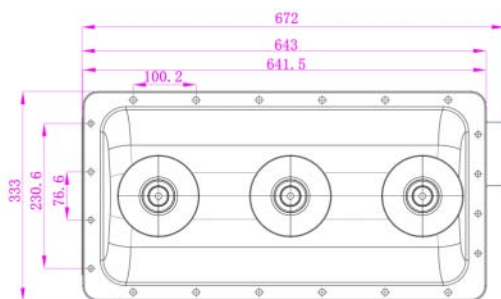


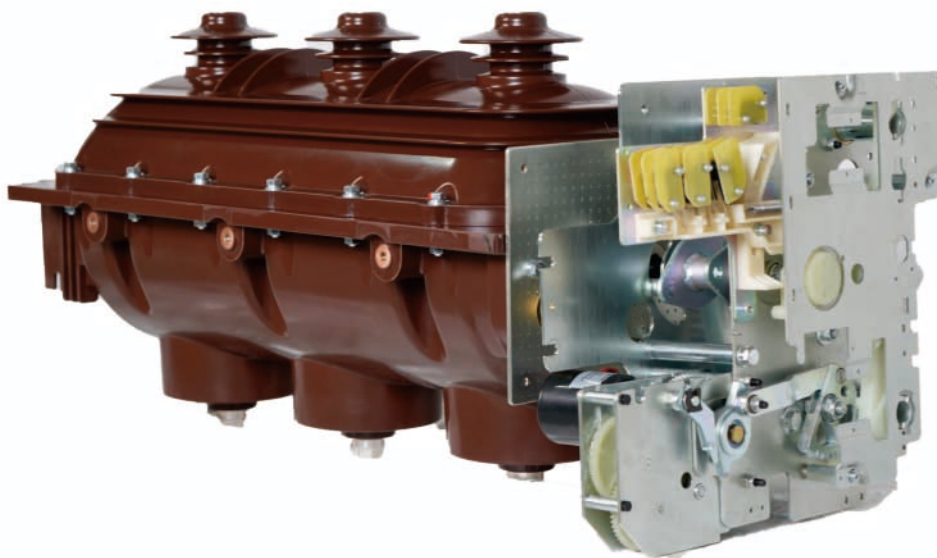
**12kV 630A/1250A 200mm**



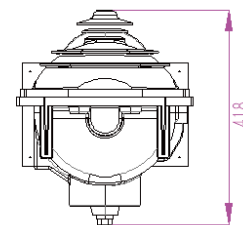
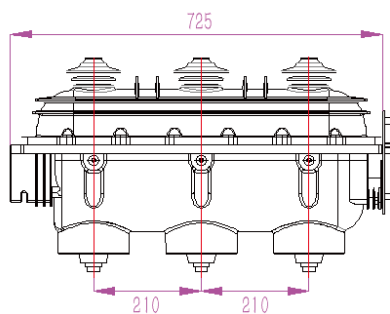
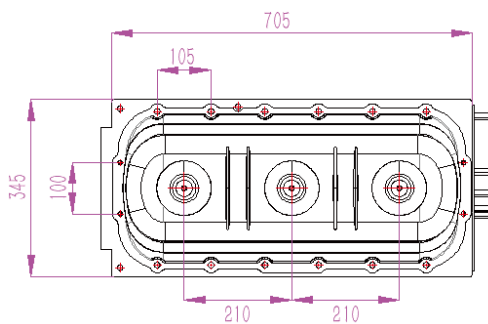


**15kV-24kV 630A/1250A 210mm**





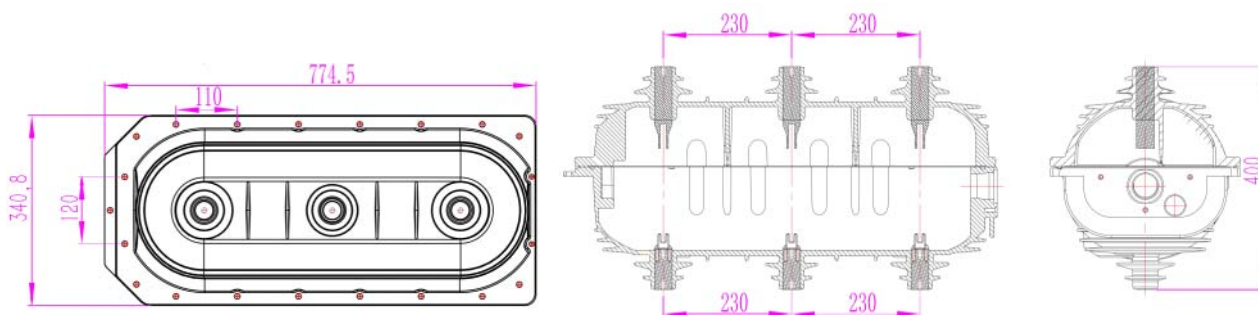
**15kV-24kV 630A/1250A 210mm**





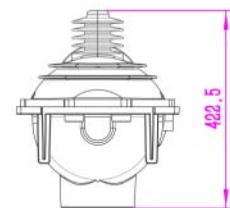
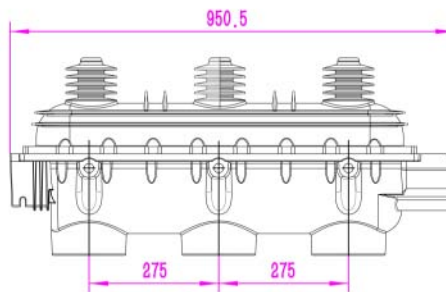
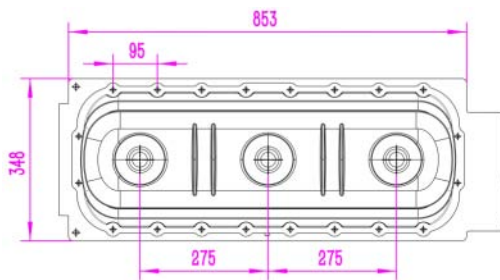


**24kV 630A/1250A 230mm**



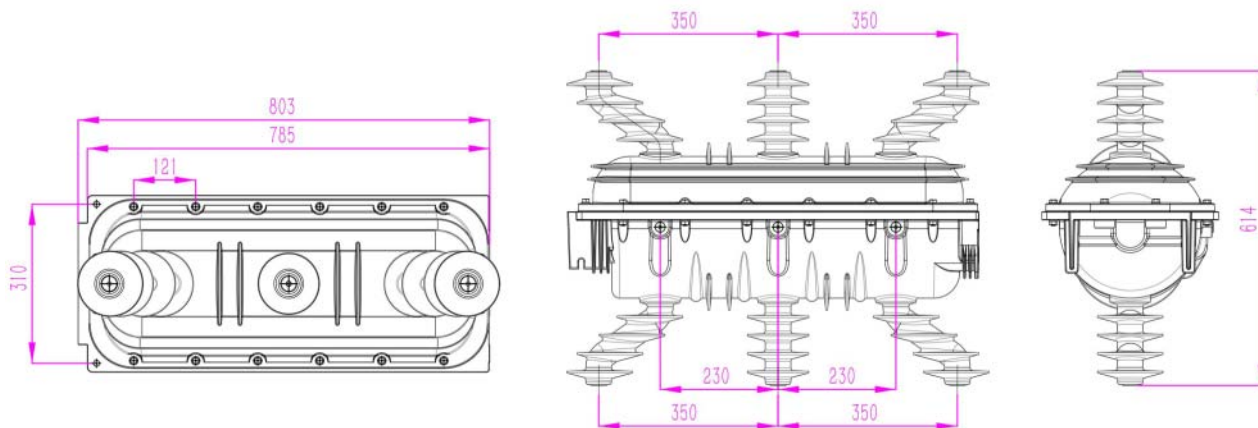


**24kV 630A/1250A 275mm**

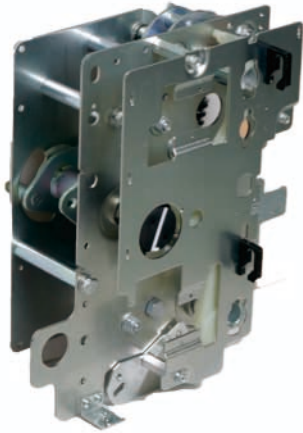




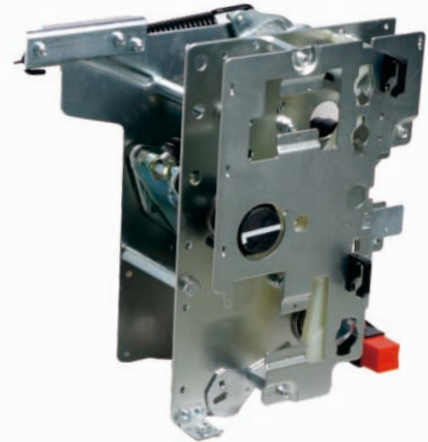
**36kV 630A/1250A 350mm**



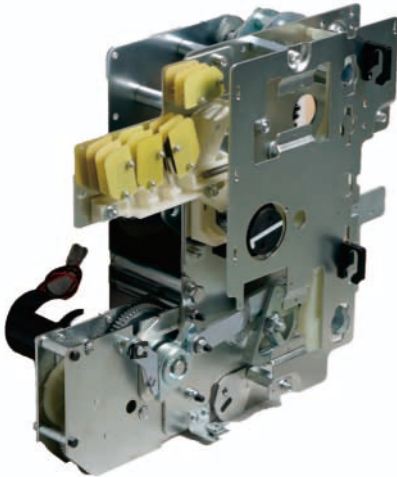
# Spring Operating Mechanism



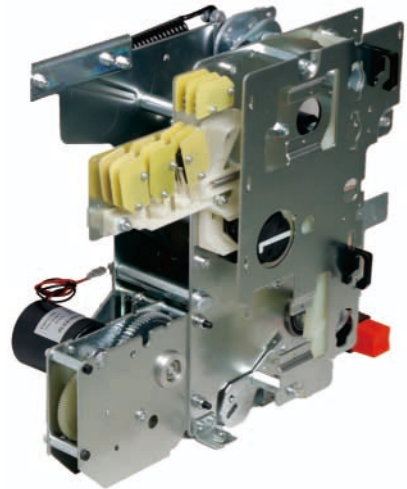
Single  
spring  
device



Double  
spring  
device

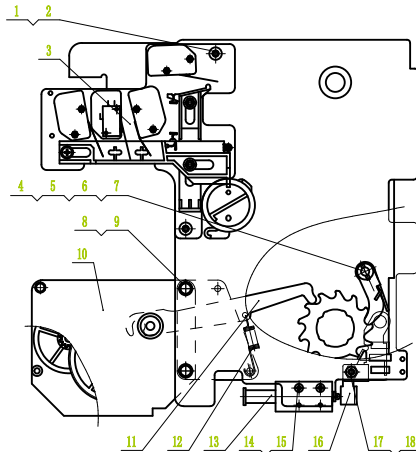
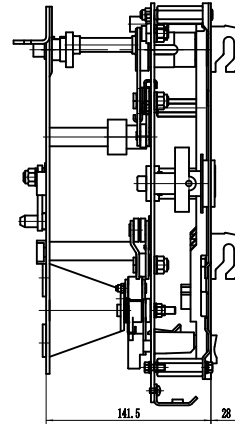
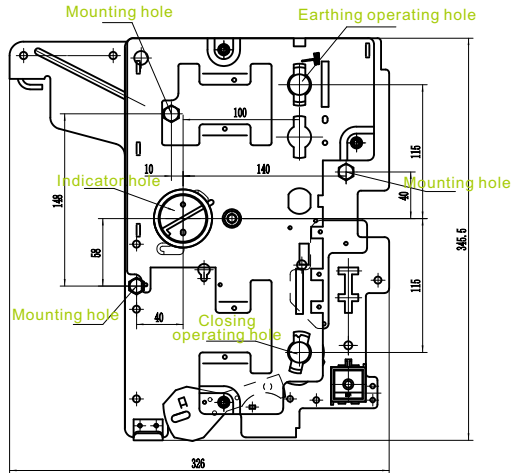


Single  
spring  
device  
with  
motor  
operation



Double  
spring  
device  
with  
motor  
operation

# Spring Operating Mechanism



1. Hexalobular head screws
2. Non-metal insert hexagonal lock nut
3. Micro switch
4. Stop claw
5. Hexagon head bolts
6. Standard spring washer
7. Flat washers for pins
8. Hexagon head bolts
9. Flat washers for pins
10. Electric gearbox
11. Push plate
12. Reset tension spring
13. SF6 opening and closing coil
14. Cross recessed head screws
15. Flat washers for pins
16. Electromagnetic opening push plate
17. Hexalobular pan head screws
18. Electromagnetic opening shaft

# Side Mount Circuit Breaker





# Accessories



Operating handle



Busbar field distributor new type



Lower busbar field distributor new type



Coil



Voltage presence indicator



Gas pressure gauge



Busbar field distributor



Tower cable protection sleeve



Auxiliary contact



Interlockings



Earthing switch set



Capacitive insulator



Mechanism cover

# Interlocking System

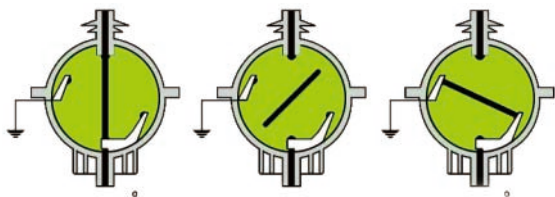
Togheter with operating mechanism and panel system. The switch has three positions: -close -open -earth Interlocking function exists between these three positions to prevent fault operation. Only when the switch is earthed, the panel door can be opened. And when the panel door is open, the switch is earthed only and no operation is permitted.



**CLOSED**

**OPEN**

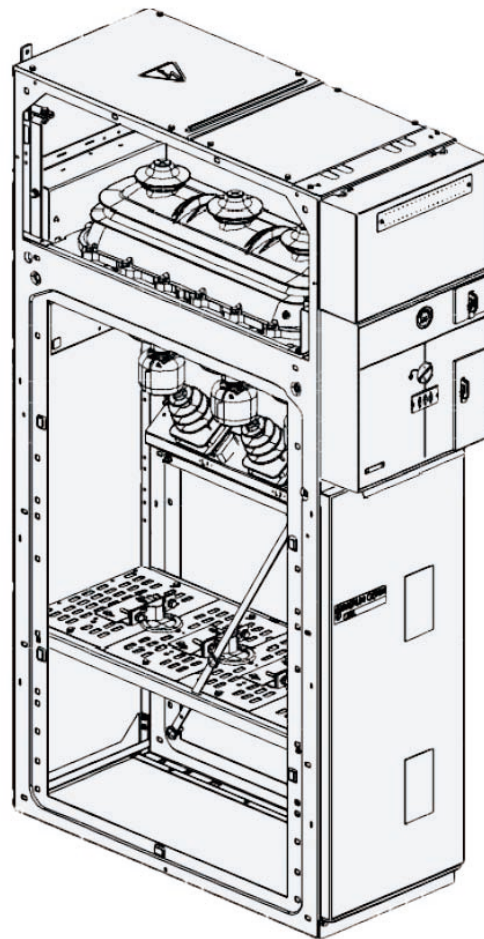
**EARTHED**



**CLOSED**

**OPEN**

**EARTHED**



# Various Panel Board's Example



# Ring Main Units



# Ring Main Units



The color and LOGO of the cabinet can be customized according to customer requirements.





# Panel Board Assembly Workshop





# Panel Board Assembly Workshop



# Expert in the Field of One-Stop Non-Standard Customized Development of Medium Voltage Distribution!

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