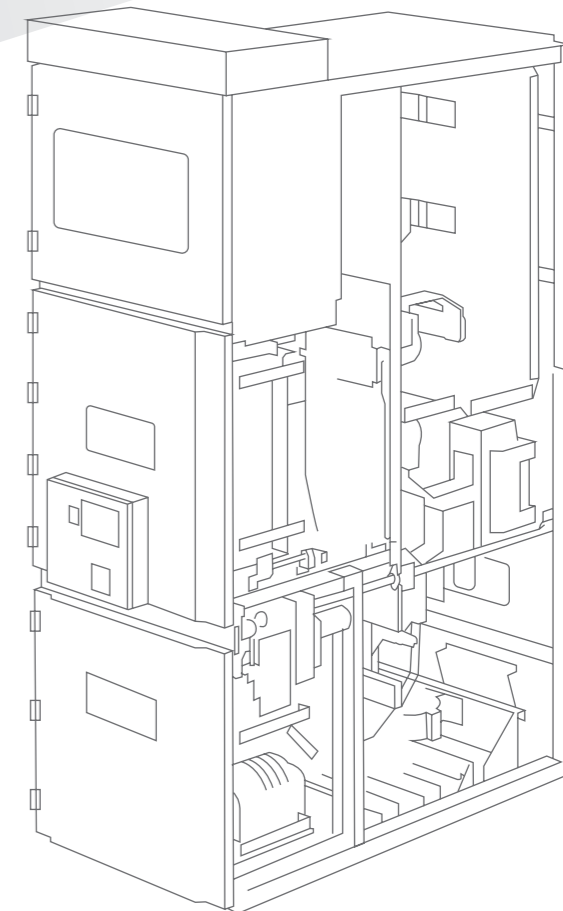




# HIGH VOLTAGE SWITCHGEAR PRODUCT SELECTION MANUAL

[www.china-xj.net](http://www.china-xj.net)

2025 First Edition



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# ACCESSORIES FOR 550 PRIMARY AIR INSULATED SWITCHGEAR



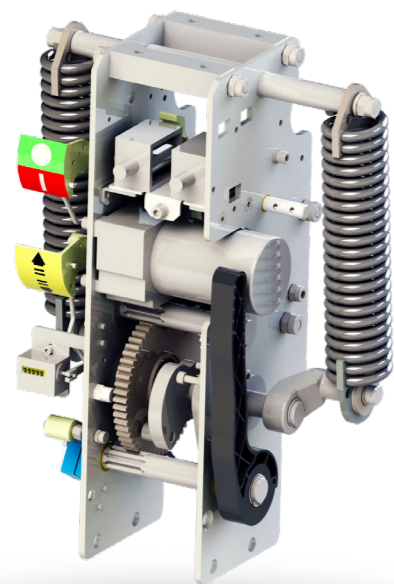
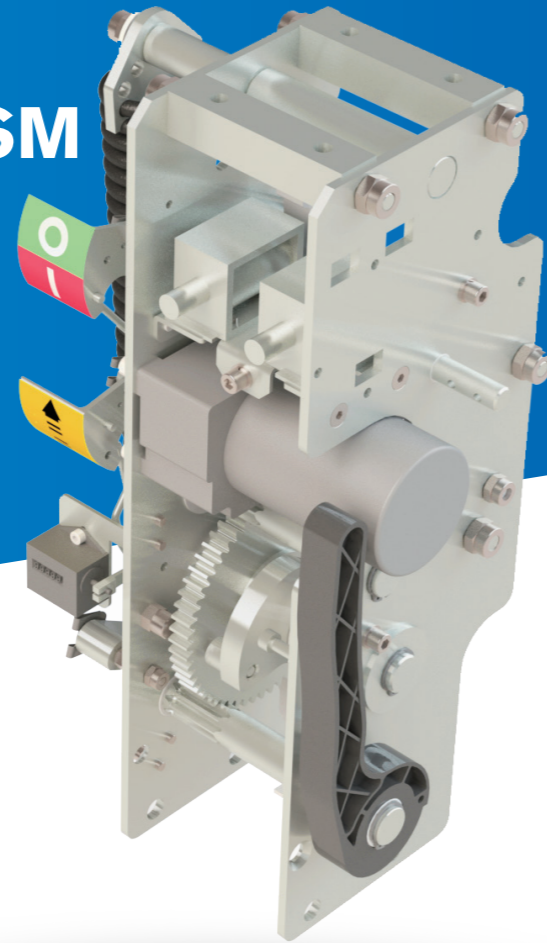
## Solutions Related to 550 Switchgear

NO.	Item	Drawing
6	Cradle (28-cabinet Compact Structure) (Electrically Operable) DPC-4-550	
7	Grounding Interlock (Electrically Operable) ((Net Cabinet Depth: 1450, 600, 550; Rear Column 40 Scheme) KYN.5XJ.363.010.6/600	
8	Right Guide Rail with Guide Rail Interlock Assembly(Aluminum )(550)(VD4) KYN.5XJ.260.205.23/550  Left Guide Rail (Aluminum, 550) KYN.5XJ.260.205.10/550  Grounding Method for VS1 and VD4 is Optional	
9	Valve Mechanism (550, VD4, Iron Sleeve) KYN.6XJ 320.010/550	
10	Earthing Switch(550) SKJ-JN15-12/31.5-150(550)-L/H(3030-35)	

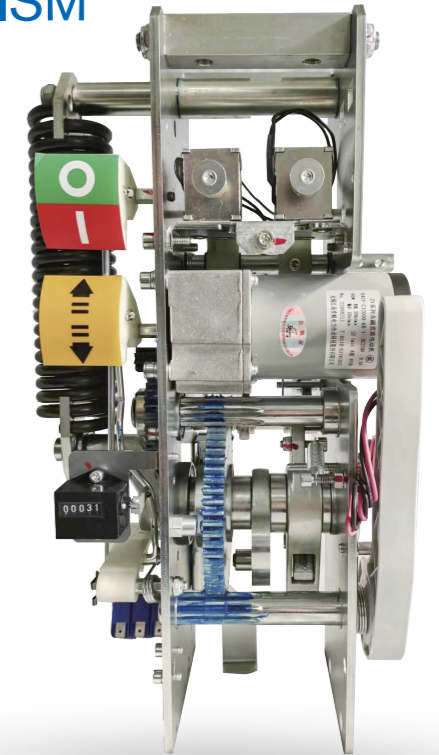




# YAOZE SKM-12 MODULAR CIRCUIT BREAKER MECHANISM



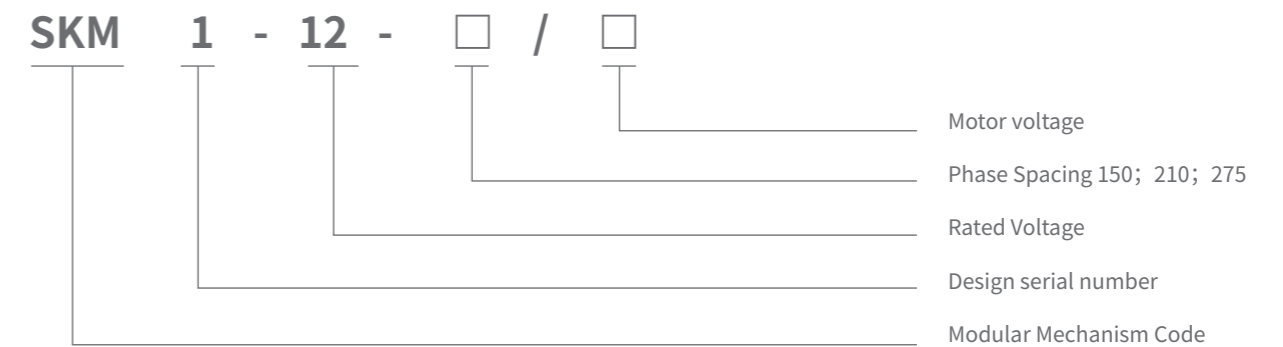
## SKM-12 CIRCUIT BREAKER SPRING OPERATING MECHANISM







### Product Overview

The spring operating mechanism adopts an independent design from the frame. It can be used either as a fixed installation unit or assembled with a withdrawable truck to form a draw-out unit. It features long service life, simple maintenance, no pollution, no explosion risk, and low noise, and is suitable for harsh working conditions such as frequent operations.

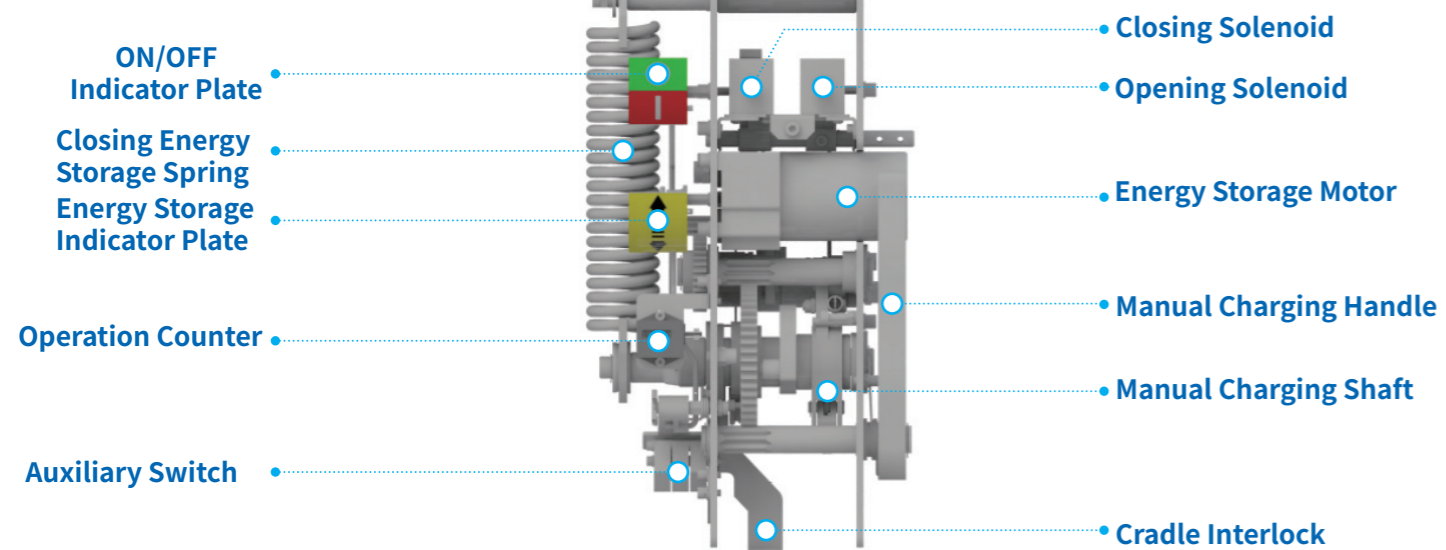
### Model Composition And Meaning



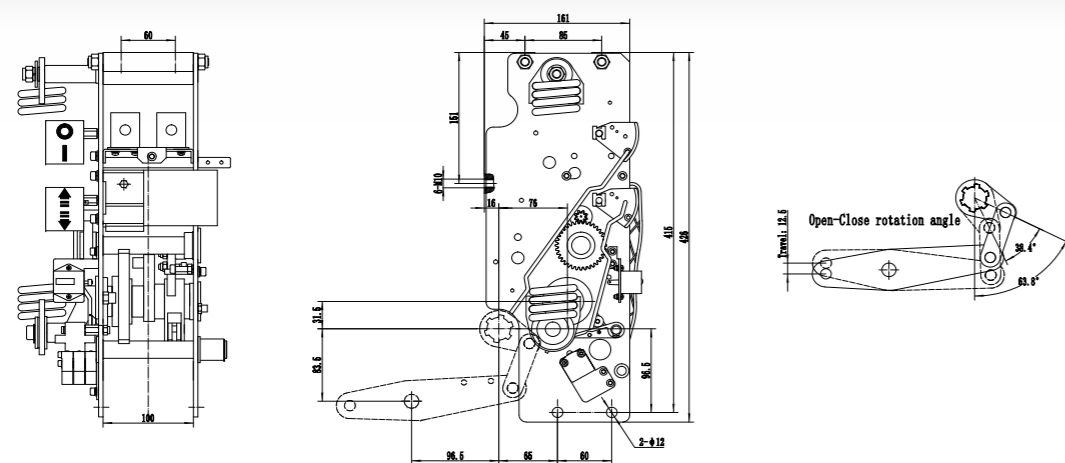
## Product Features

-  The spring operating mechanism adopts an innovative modular design.
-  Optional phase spacing and pole spacing to meet various special requirements.
-  Stable mechanical and electrical performance, high reliability, with a mechanical life  $\geq 30,000$  operations.
-  The operating mechanism can be equipped with an online monitoring system for mechanical characteristics.

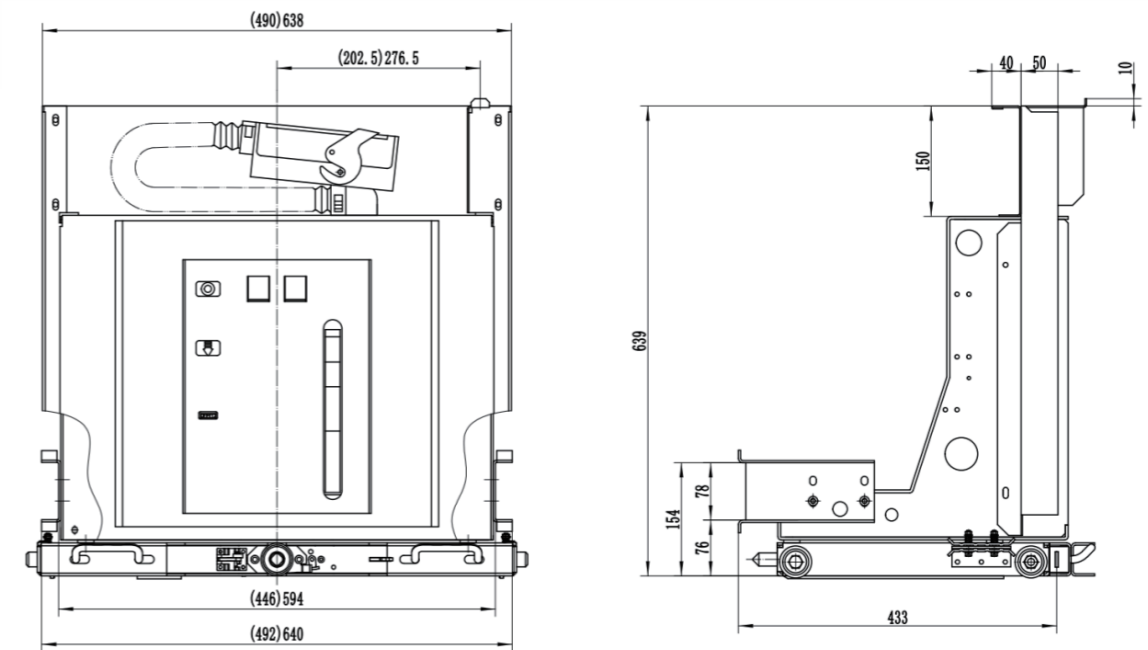
## Dimensions



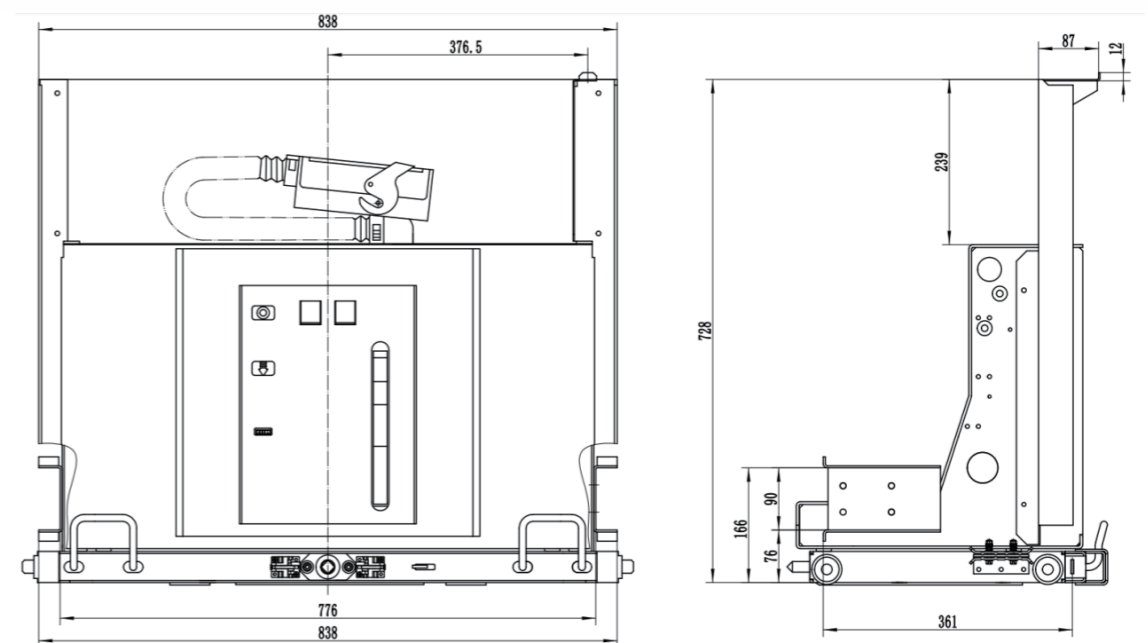
## Outline of CB Mechanism (650/800/1000 mm)



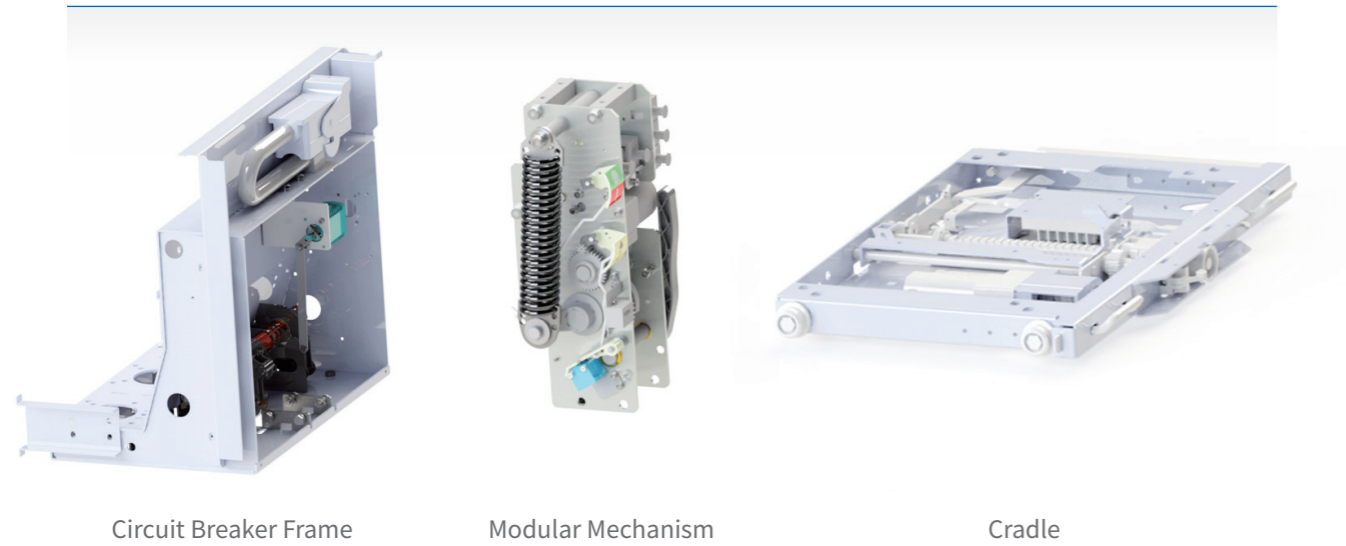
## Mounting Outline for 650/800mm CB Frame



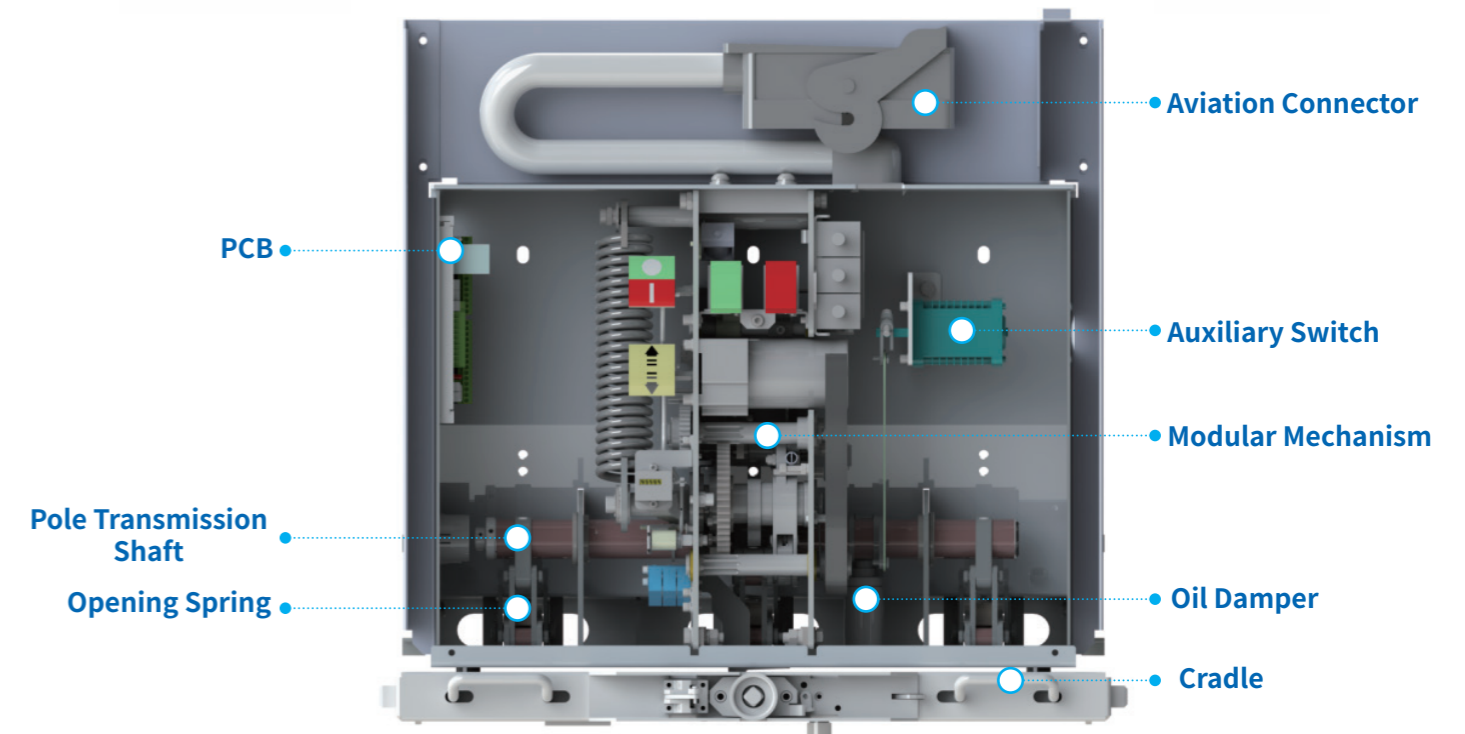
## Mounting Outline for 1000mm CB Frame



## Selection Table



## Circuit Breaker Assembly (without Poles)



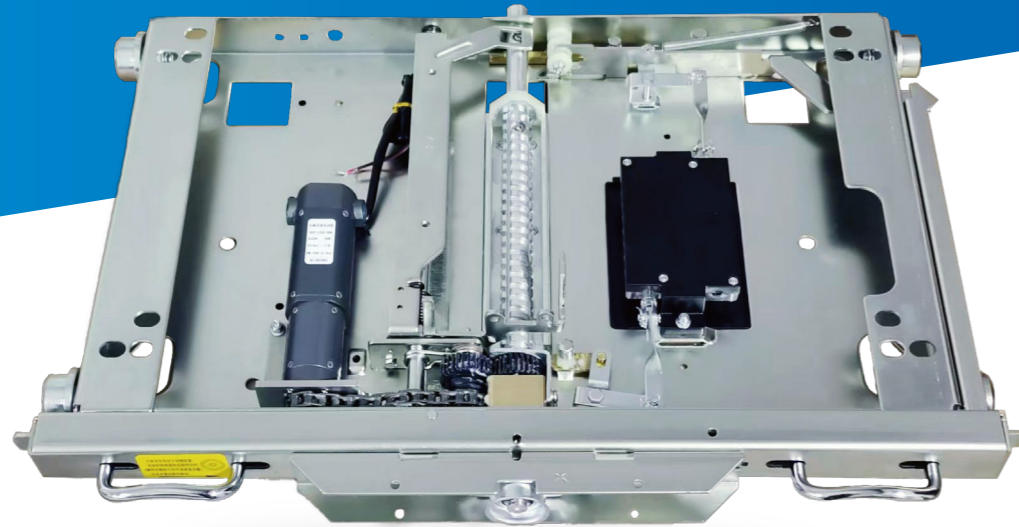
Model	Image	Cabinet Width	Model
Modular Mechanism		650mm 800mm	SKM1-JG-800
		1000mm	SKM1-JG-1000
Circuit Breaker Frame		650mm 800mm 1000mm	SKM1-KJ-650 SKM1-KJ-800 SKM1-KJ-1000
Cradle (Motorized or Manual)			800mm

### Main Parameters of Closing and Opening Electromagnets and Related Electrical Components

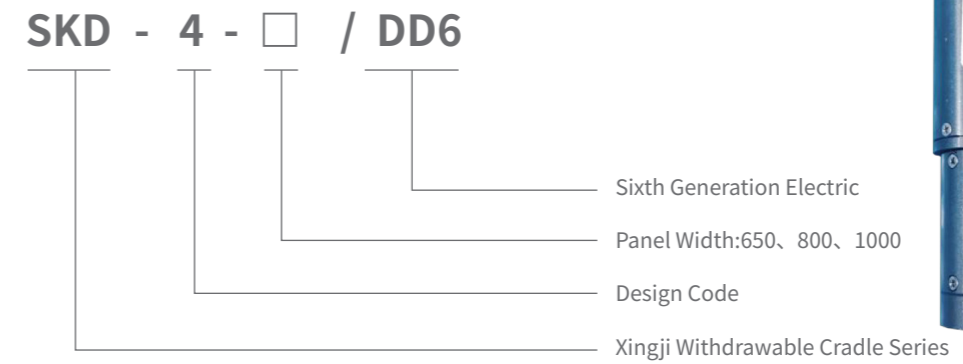
Item	Closing Solenoid		Opening Solenoid		Interlocking Solenoid		Anti-pumping Relay	
	DC220	DC110	DC220	DC110	DC220	DC110	DC220	DC110
Rated Op. Voltage (V)	DC220	DC110	DC220	DC110	DC220	DC110	DC220	DC110
Rated Op. Current (A)	1.1	2.2	1.1	2.2	25mA		9.1mA	
Rated Power (W)	242	242	242	242	2.7		1	
Operating Voltage Range	85% -100% Rated Voltage		65% -120% Un open; <30% Un no open.					



# SKD-4-800/DD6 ELECTRIC CRADLE



## Model Composition And Meaning



The overall dimensions of the withdrawable cradle are the same as the manual type, with no need to modify the panel frame.

## Product Overview

Our company is the first in China to independently develop electric cradles. Since its initial development, the product has evolved to the sixth generation. From the third generation onward, a horizontal motor design has been adopted (Patent No.: CN201498909U). The sixth-generation electric cradle features a cylindrical motor design, further optimizing the overall structural layout. The motor is more compact, safe, reliable, and offers higher stability.

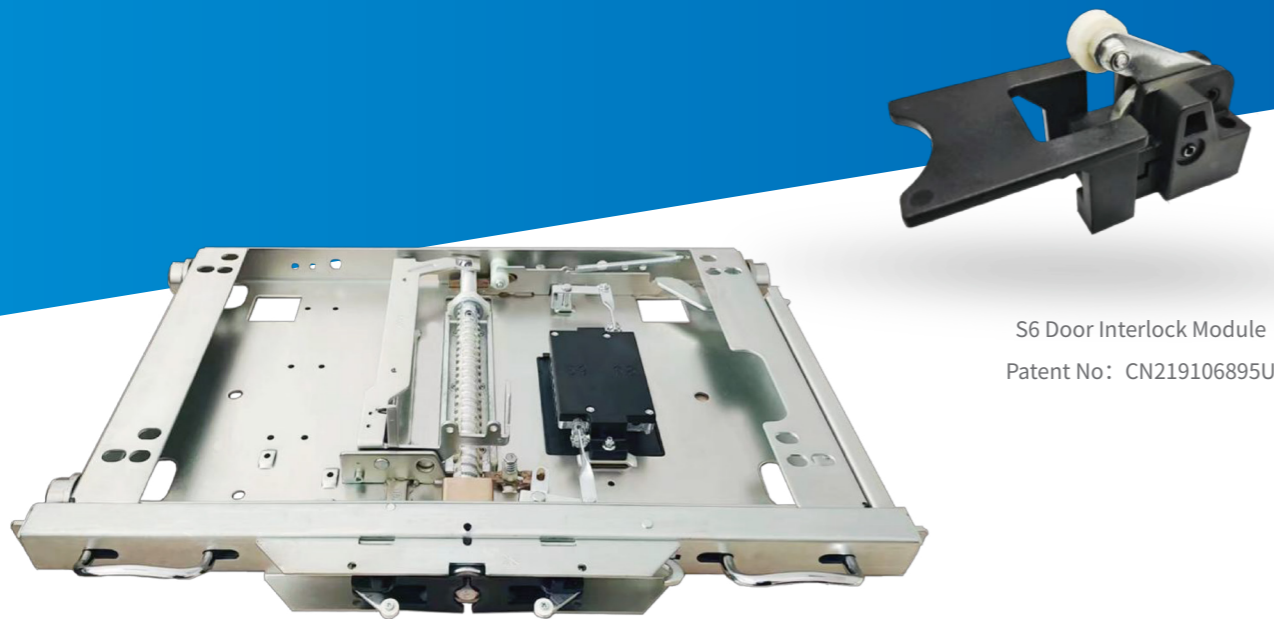
## Product Features

- Simple structure, strong versatility. Suitable for compact switchgear.
- Spray test  $\geq$  96 hours.
- Auxiliary switch: integrated design, better insulation.
- The mechanical life can reach  $\geq$  3000 racking in/out operations.
- Equipped with various control modules, supports 110V/220V control voltages.

## Product Features

- Same dimensions as manual cradle; no frame modification. manual truck height.
- A miniature permanent magnet motor is used,
- The electric/manual switching clutch disengagement is easier.
- Manual priority function can be added as required (DD6S).
- The latest door interlock function can be added as required (DD6/S6).
- Compatible with our standard modules.

# SKD-4-800/S6 CRADLE (MODULAR PATENTED PRODUCT)



S6 Door Interlock Module  
Patent No: CN219106895U

## Product Features

- Compared with traditional door interlock modules, it is more stable and reliable.
- When the cabinet door is not closed, the handle cannot be forcibly inserted.

Type	A
SKD-4-650/S6	101
SKD-4-800/S6	130
SKD-4-1000/S6	

## SKD Cradle Door Interlock Function

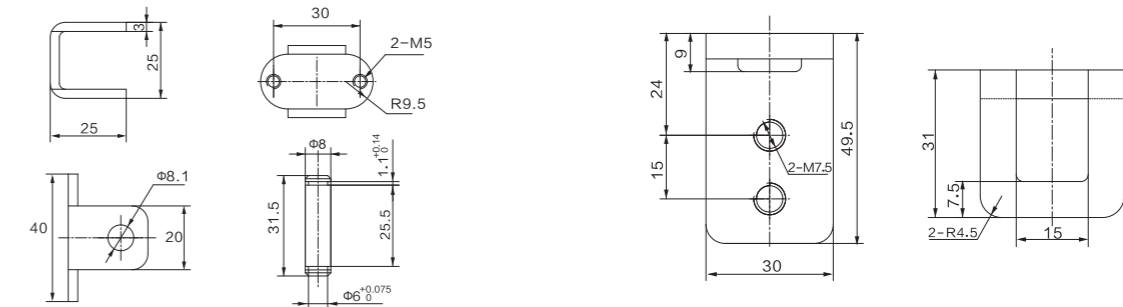
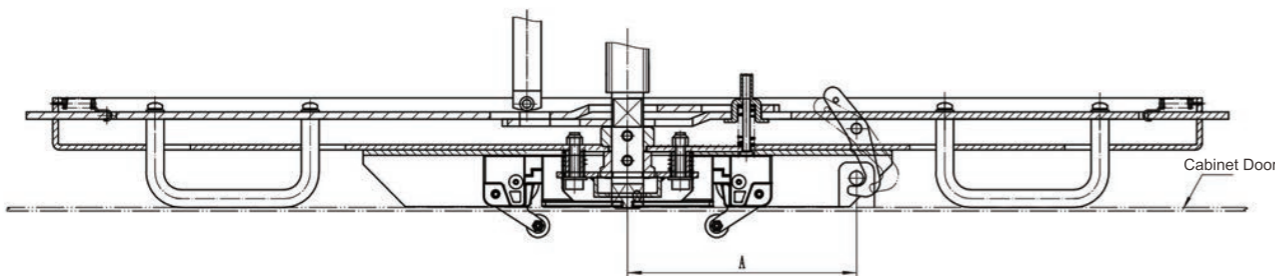
### SKD-□-□/ S6 Cradle

This chassis model adds a door lock interlock function on top of the first item. That is, after the handcart leaves the test position, the cabinet door is locked and cannot be opened. Only when returned to the test position can the door be opened. This interlock function requires modification of the cabinet door.

Note: The door interlock block structure is basically the same as the original /S and /S5, with no significant difference in appearance. It uses a modular structure for easy installation and replacement.

### Mode 1:

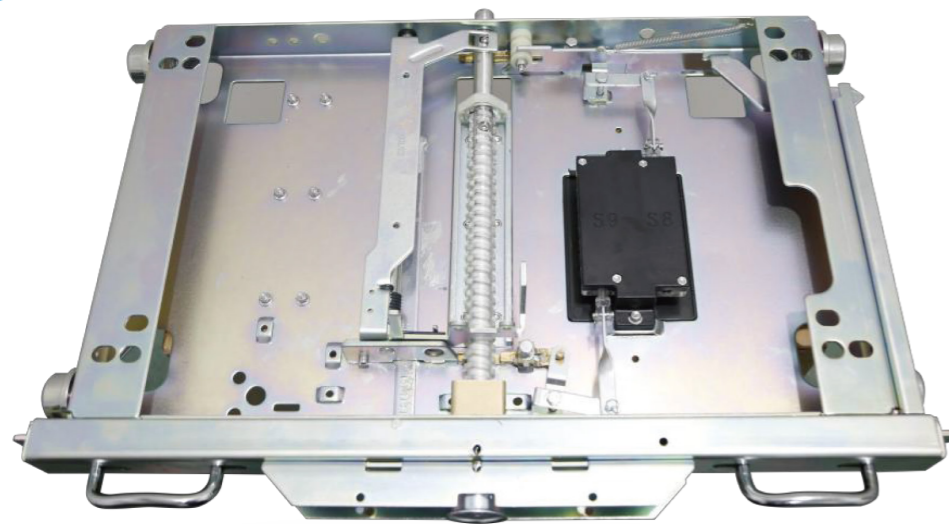
### Mode 2:








# FULLY INSULATED AUXILIARY SWITCH FOR SKD CRADLE



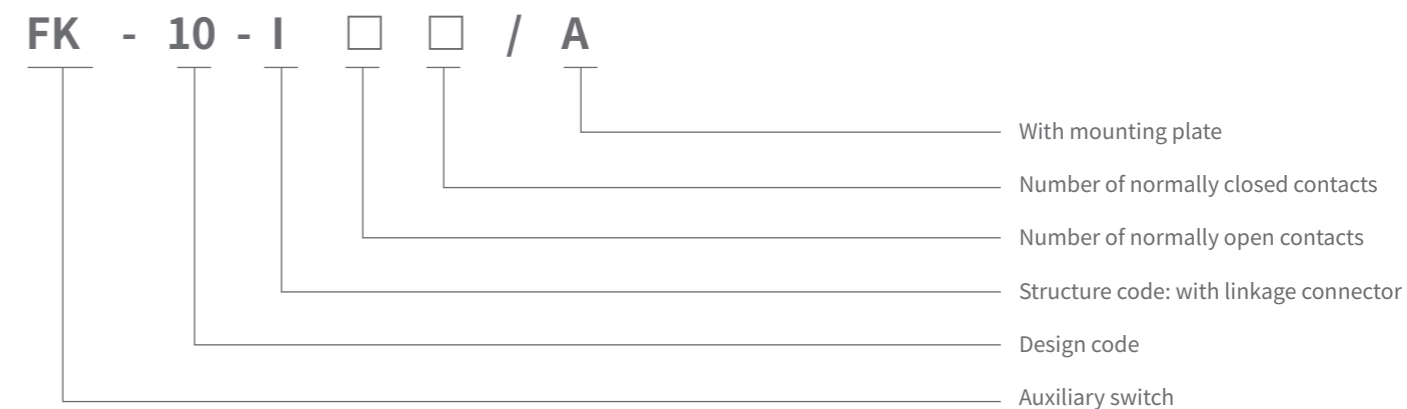
Patent No.:  
CN209963617U (6 groups)  
CN218996548U (10 groups)



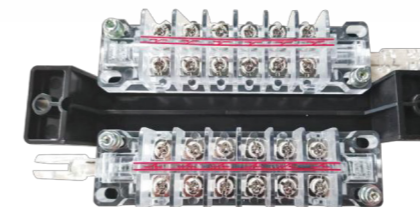
## Product Features

-  Auxiliary switch: integrated design, better insulation.
-  Mechanical life of the auxiliary switch  $\geq$  5000 operations.
-  Convenient for installation and on-site maintenance and replacement.
-  No adjustment is required for the internal position of the switch.
-  Suitable for all series specifications of chassis.

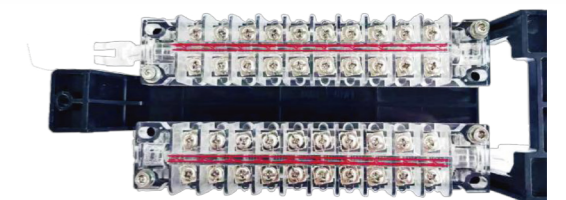
## Model Composition And Meaning



## Optional auxiliary switch



6NO + 6NC



10NO + 10NC

## Product Overview

The cradle is primarily used in withdrawable switchgear to house components such as circuit breakers and current transformers, enabling their insertion and withdrawal, and serving as an auxiliary mechanism for connecting the components to the busbars. When the cradle is interlocked with the internal mechanisms of the circuit breaker and other components within the medium-voltage cabinet, it satisfies the "Five Preventive" interlock requirements specified in GB 3906.































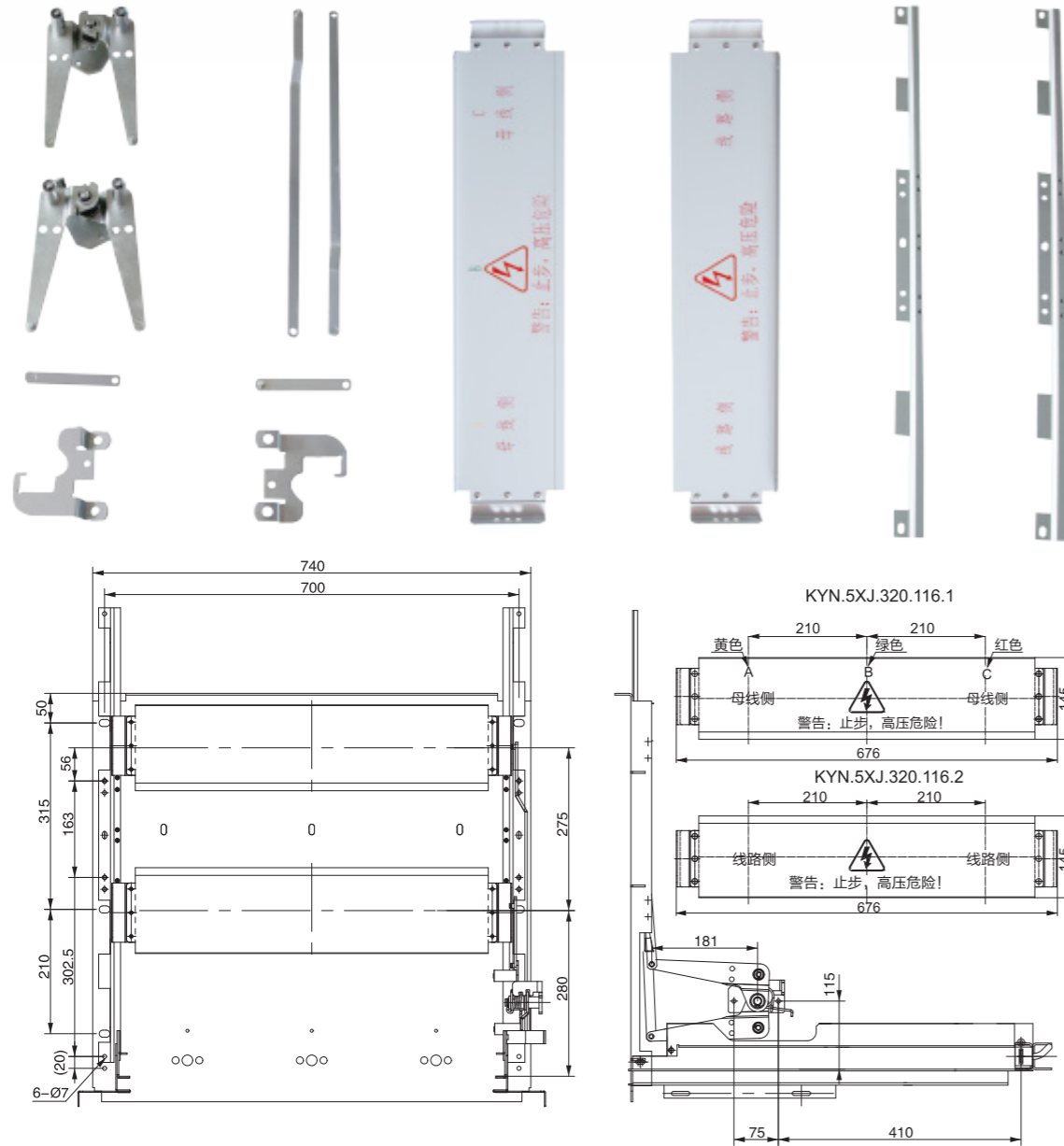






## 1.800 Shutter Mechanism KYN.5XJ.320.110

(Second Generation Cabinet: Guide Rail Type Solution)



Note: If the SGCC lettering as shown is required, please specify when ordering.



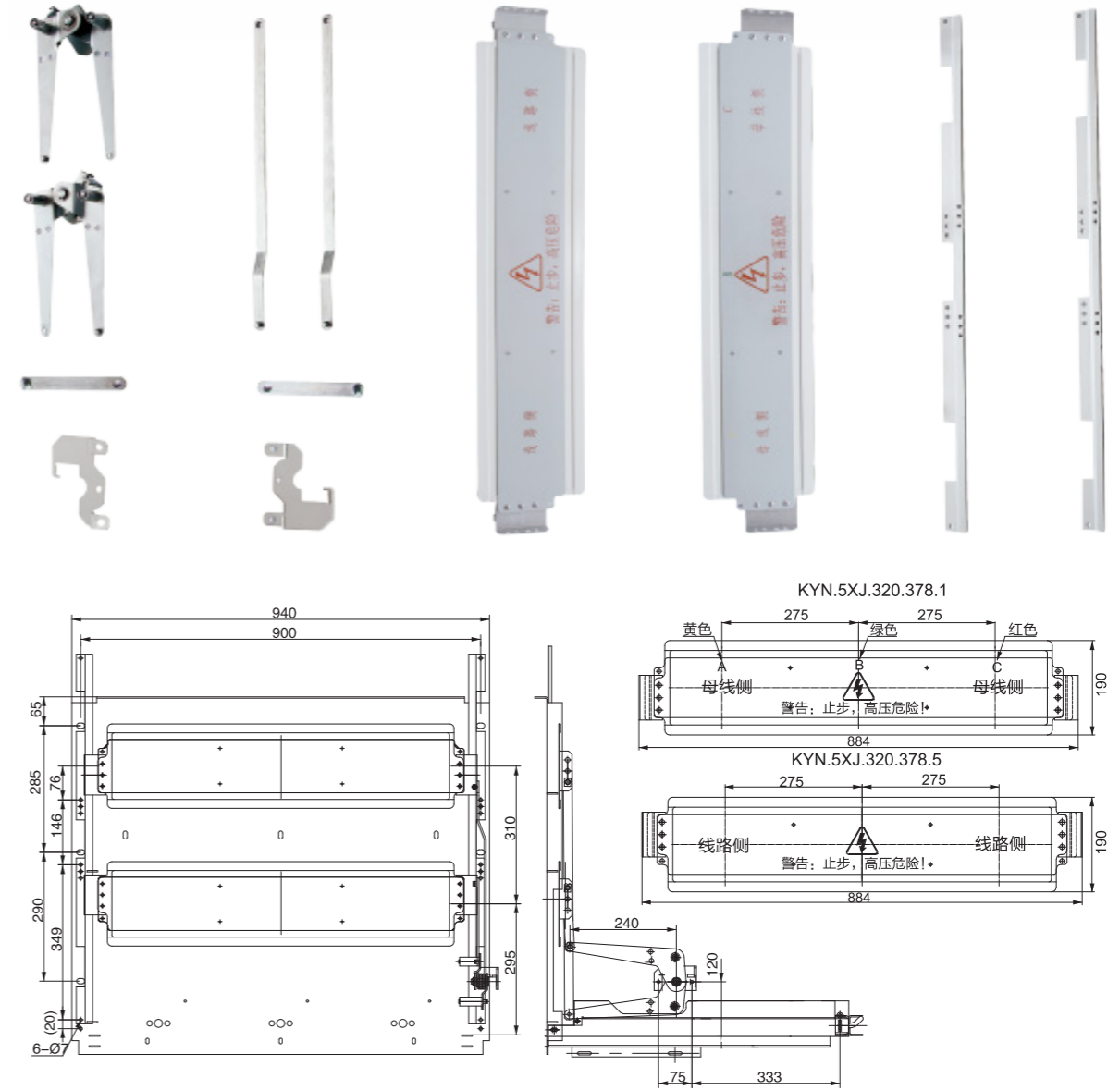
## 2.Specification

- No need to modify the cabinet structure.
- Please specify the truck model (e.g., VS1, VD4, etc.) when ordering. For special trucks, please provide drawings.
- The standard shutter plate is a metal plate. For an insulated shutter, add /JY after the model number.
- For self-locking function, add /HXS after the model number.

## 1.1000 Shutter Mechanism KYN.5XJ.320.111 - Universal for VS1 and VD4

(Second Generation Cabinet: Guide Rail Type Solution)

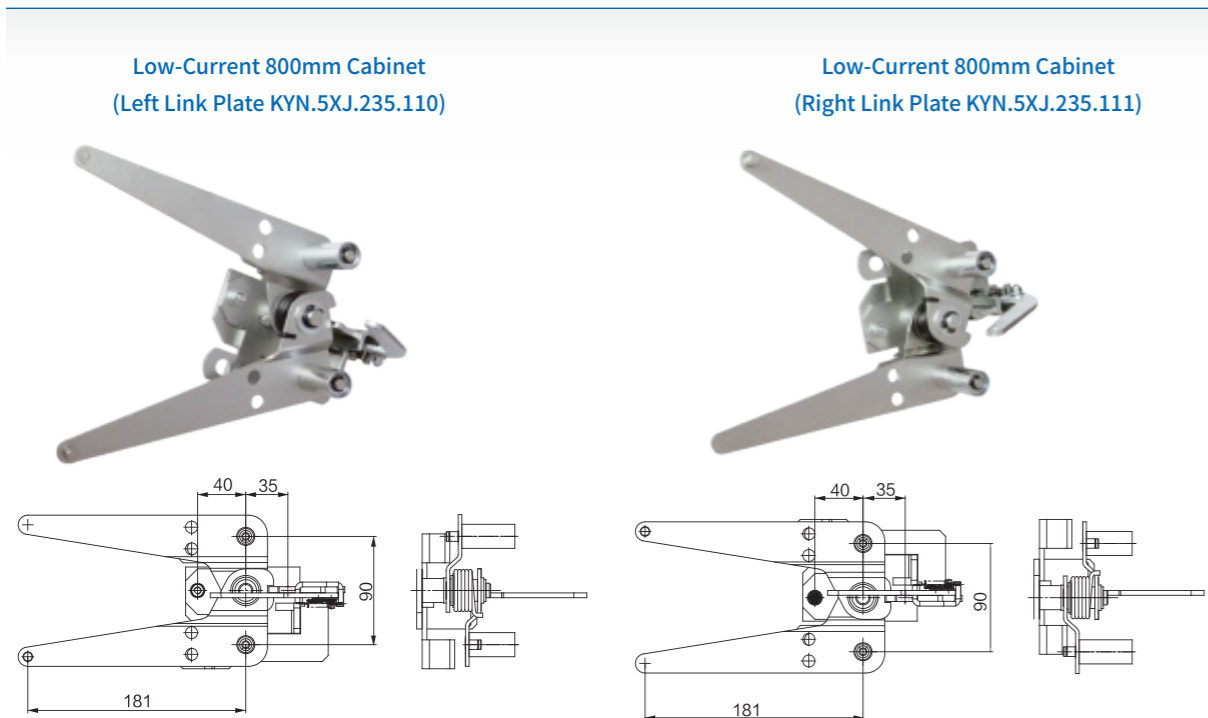
(Sulfurization solutions are available. For details, please consult our technical department.)



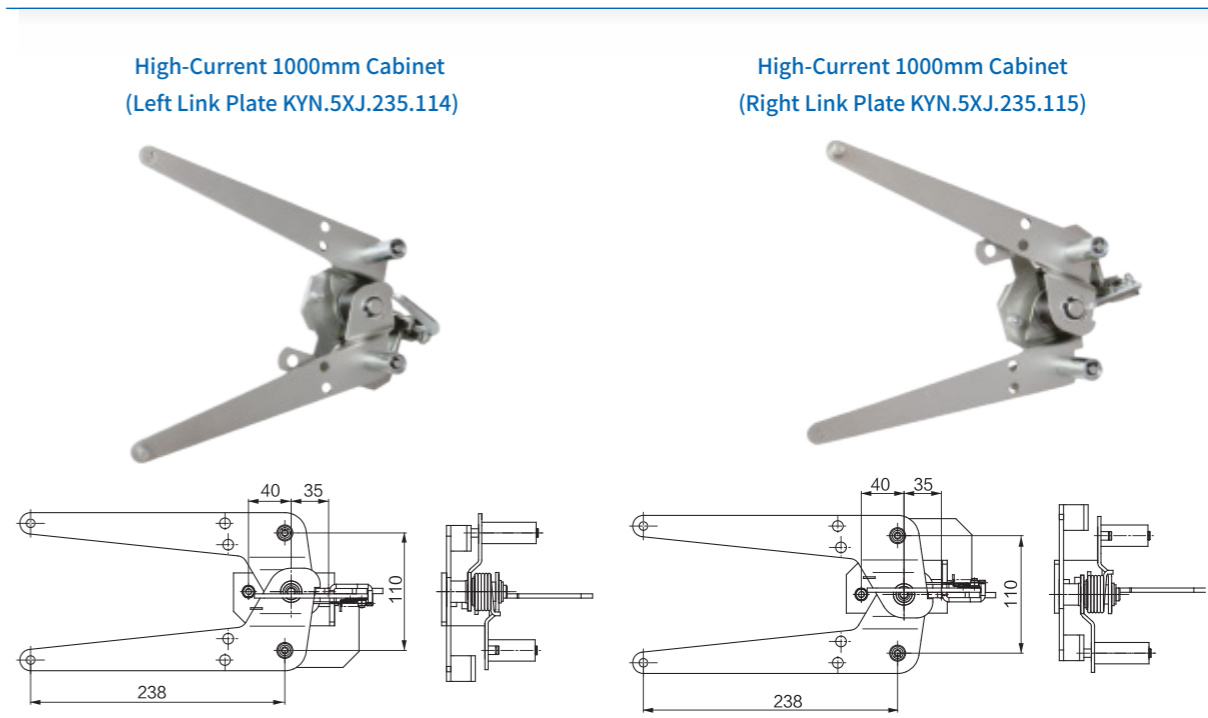
## 2.Specification

- No need to modify the cabinet structure.
- Please specify the truck model (e.g., VS1, VD4, etc.) when ordering. For special trucks, please provide drawings.
- Shutter mechanism fits standard contact boxes. For raised/taller types, specify when ordering.
- Standard shutter: insulated (clearance limited). Optional metal plate available; specify when ordering.
- For self-locking function, add /HXS after the model number.

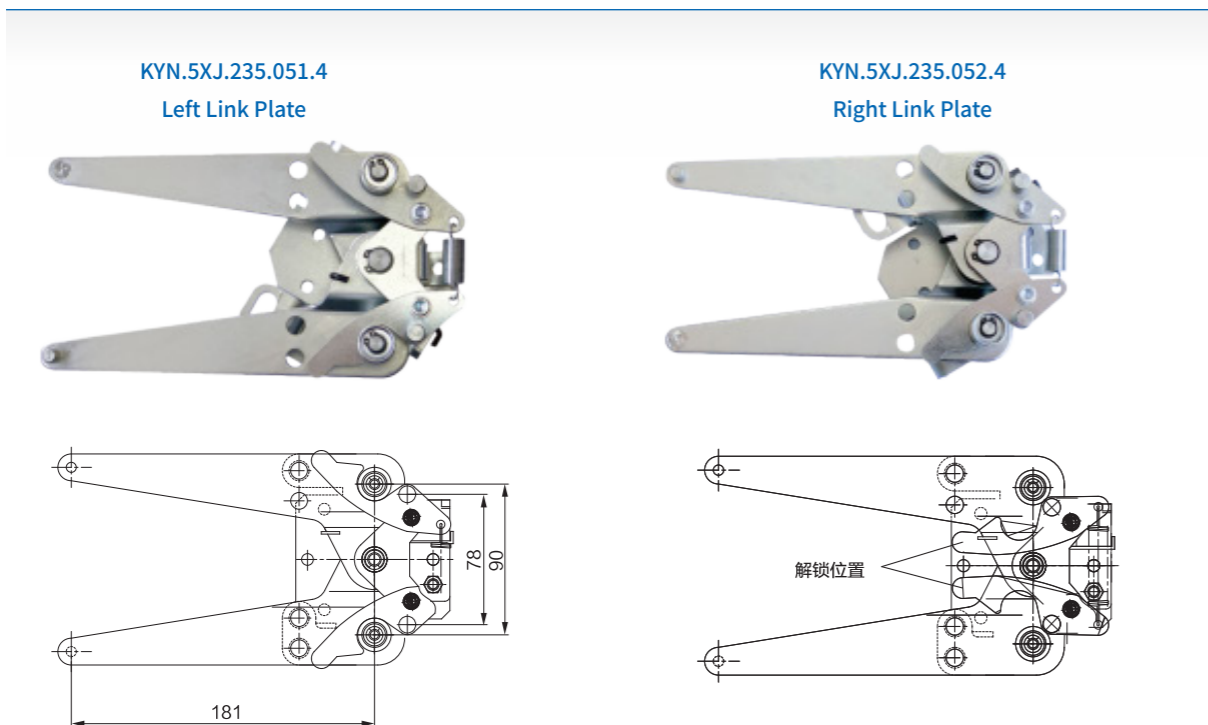
## Shutter Mechanism Self-Locking Device 5XS.320.010/HZS



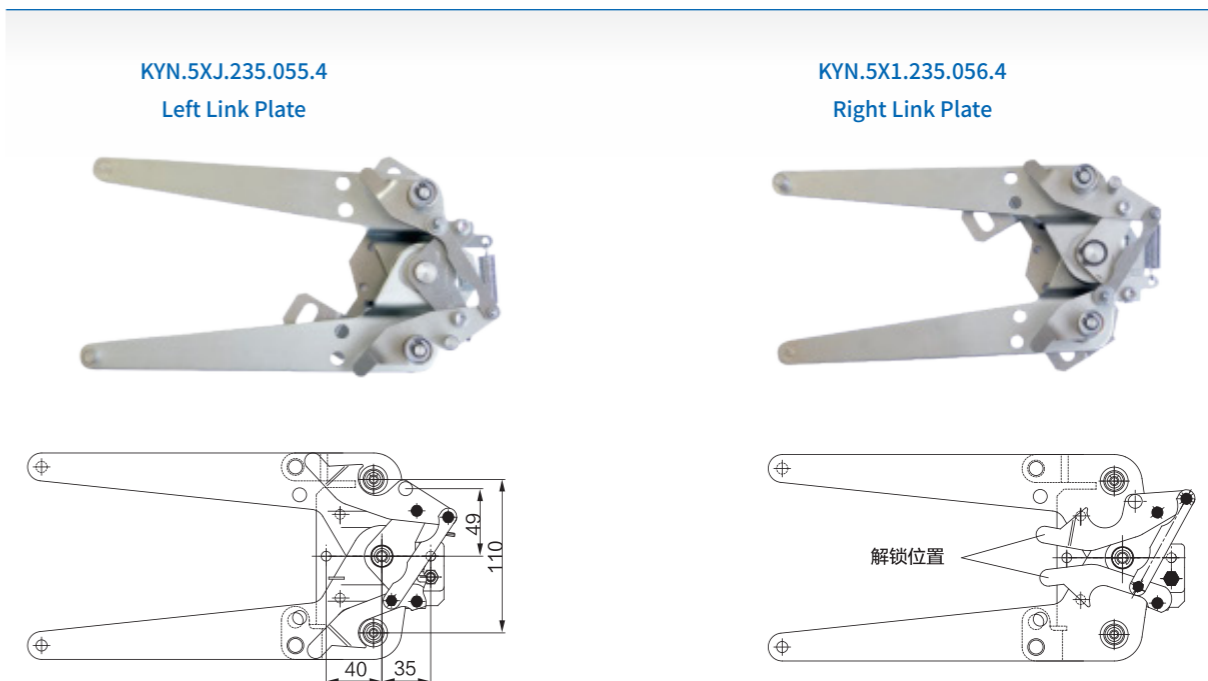
## Shutter Mechanism Self-Locking Device 5XS.320.011/HZS



## Shutter Mechanism Self-Locking Device 5XS.320.010/HZS1



## Shutter Mechanism Self-Locking Device 5XS.320.011/HZS









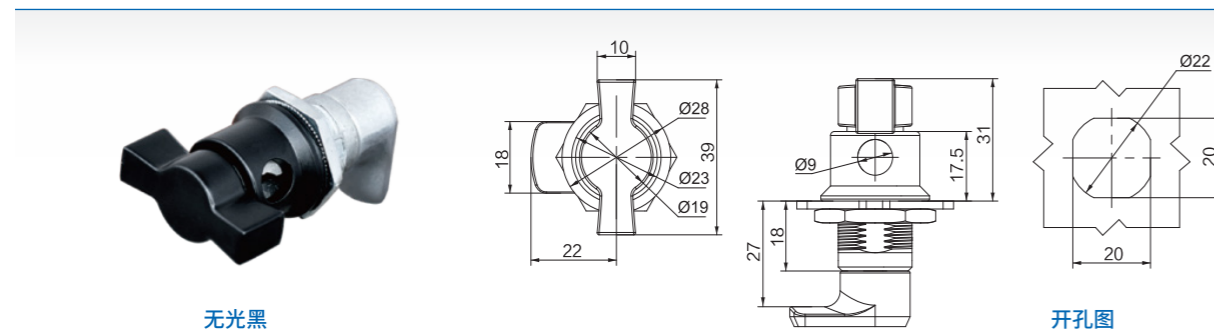




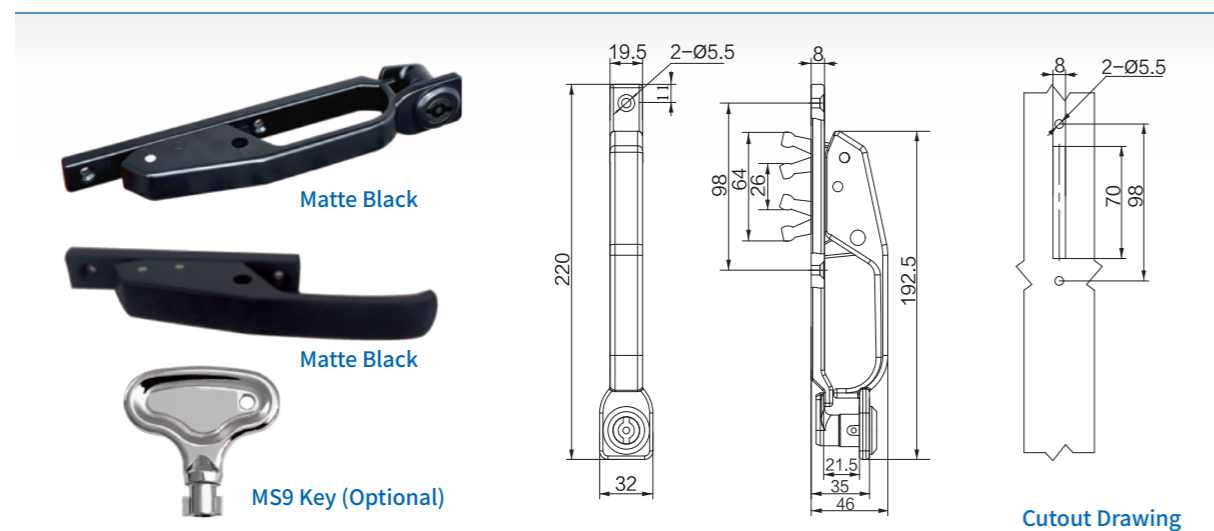




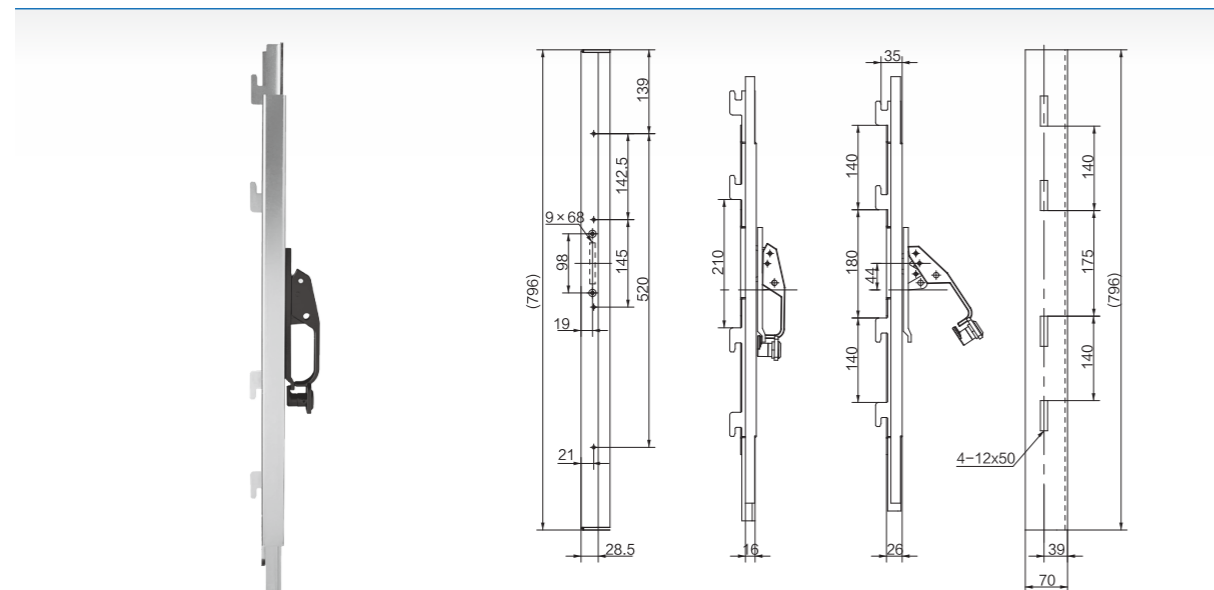
## 5. Door Lock GMS3-1P



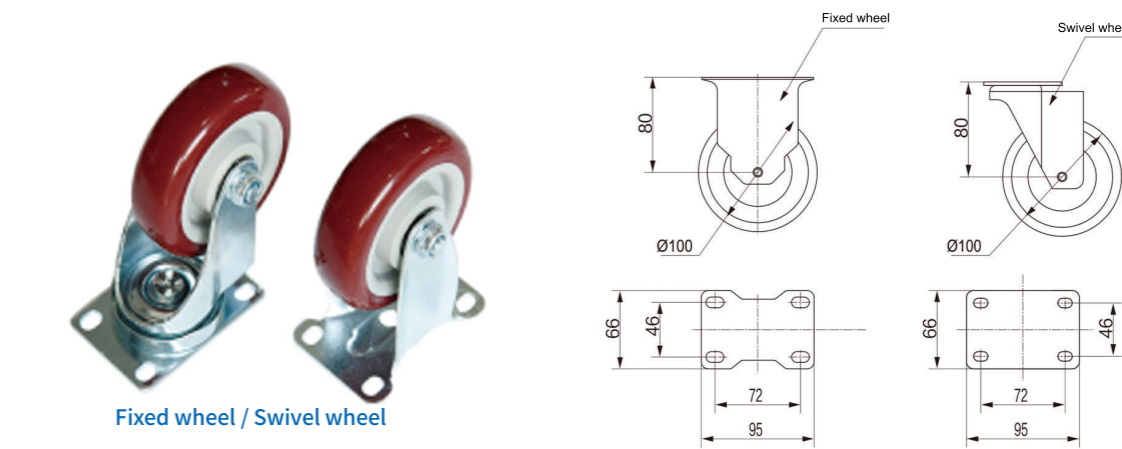
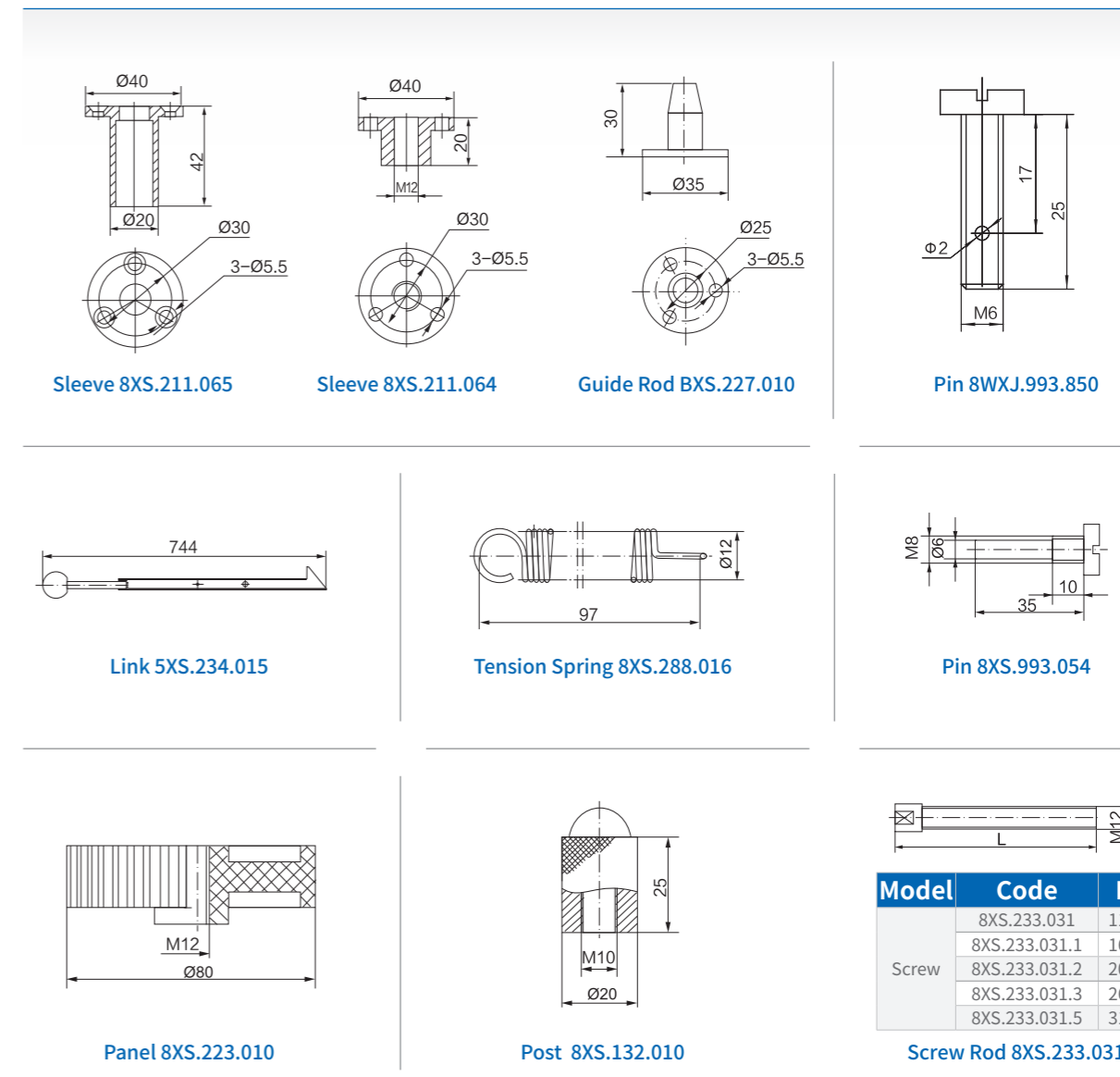
## 6. Quick Release Door Lock GMS4-1P GMS4-2P



## 7. Quick-Release Door Lock KYN.5XJ.GMS4-1P



## 10. Transfer Cart Accessories ZYC.3XJ.087.004





















# YAOZE SKM-40.5 Circuit Breaker Operating Mechanism Assembly



## Product Features

-  Circuit breaker assembly: mechanism, frame & racking mechanism, matched height.
-  Frame pole mounting holes compatible with mainstream solid-sealed poles.
-  Mechanism bottom layout, easy commissioning & maintenance.
-  The racking mechanism supports  $\geq 3000$  racking in/out operations.。  
Mechanism: stable performance, high reliability, mechanical life  $\geq 5000$  operations.

## Service Conditions

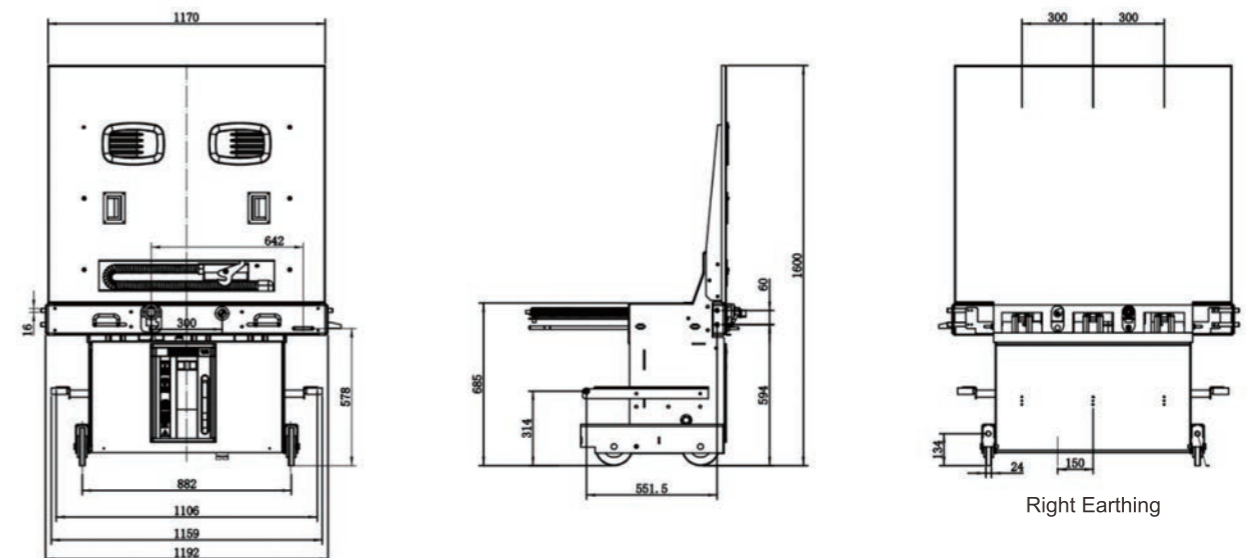
**Altitude:** Not exceeding 2000 m;

**Ambient Temperature:** Upper limit  $+40^{\circ}\text{C}$ , lower limit  $-50^{\circ}\text{C}$ ;

**Ambient Humidity:** Daily average relative humidity  $\leq 95\%$ , monthly average relative humidity  $<90\%$ ;

**Seismic Intensity:** Not exceeding Grade 8; No fire or explosion hazard, no severe vibration, and no serious pollution such as chemical corrosion.

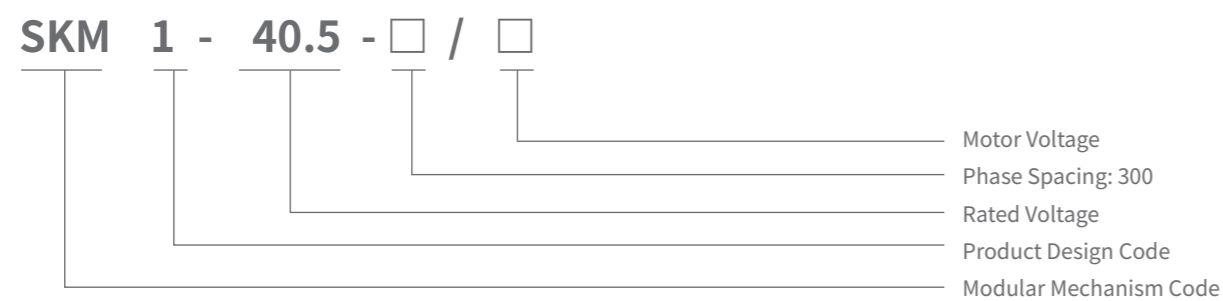
## Outline and Installation Dimensions



## Product Overview

Yaoze SKM-40.5 indoor high-voltage vacuum circuit breaker mechanism assembly is suitable for three-phase AC 50Hz, 40.5kV systems. It can be used in industrial and mining enterprises, power plants and substations for making and breaking load current, overload current and fault current, and is suitable for frequent operation.

## Model Composition And Meaning

















## Lifting Trolley Selection Table

Name	Type	Picture	Outline Dimension Drawing	Parameters																
Lifting Trolley	ZYC-1-650/800 ZYC-1-800/1000	Single-layer 	<table border="1"> <tr> <th>产品型号</th> <th>L1</th> <th>L2</th> <th>L3</th> </tr> <tr> <td>ZYC-1-650</td> <td>520</td> <td>515</td> <td>350</td> </tr> <tr> <td>ZYC-1-800</td> <td>670</td> <td>665</td> <td>500</td> </tr> <tr> <td>ZYC-1-1000</td> <td>870</td> <td>865</td> <td>700</td> </tr> </table>  	产品型号	L1	L2	L3	ZYC-1-650	520	515	350	ZYC-1-800	670	665	500	ZYC-1-1000	870	865	700	Hydraulic adjustable lifting trolley, with two universal adjustable width ranges: 650-800 mm and 800-1000 mm. Specifications: Minimum height: 350 mm Maximum height: 940 mm (excluding screw lifting height) Load capacity: 400 kg.
		产品型号		L1	L2	L3														
ZYC-1-650	520	515	350																	
ZYC-1-800	670	665	500																	
ZYC-1-1000	870	865	700																	
Double-layer 	  																			
Electric Lifting Trolley	ZYC-1D	Double-layer 	  	Minimum height: 350 mm Maximum height: 1500 mm Load capacity: 300 kg																

Name	Type	Picture	Outline Dimension Drawing	Parameters																
Floor-standing Lifting Trolley	ZYC-3D	Electric 	   	<ol style="list-style-type: none"> <li>Compatible with vacuum circuit breakers for panel widths of 650-1000 mm</li> <li>Maximum load capacity: 300 kg</li> <li>Fully charged battery supports up to 100 operation cycles</li> <li>Lifting and lowering speed can be adjusted according to usage conditions</li> </ol>																
Fixed transfer trolley	ZYC-650 ZYC-800 ZYC-1000		     <table border="1"> <tr> <th>产品型号</th> <th>L1</th> <th>L2</th> <th>L3</th> </tr> <tr> <td>ZYC-1-650</td> <td>546</td> <td>515</td> <td>350</td> </tr> <tr> <td>ZYC-1-800</td> <td>696</td> <td>665</td> <td>500</td> </tr> <tr> <td>ZYC-1-1000</td> <td>896</td> <td>865</td> <td>700</td> </tr> </table>	产品型号	L1	L2	L3	ZYC-1-650	546	515	350	ZYC-1-800	696	665	500	ZYC-1-1000	896	865	700	Fixed transfer trolley, available in three widths: 650 / 800 / 1000 mm, with fixed height
产品型号	L1	L2	L3																	
ZYC-1-650	546	515	350																	
ZYC-1-800	696	665	500																	
ZYC-1-1000	896	865	700																	

### Accessories for KYN28 Withdrawable Switchgear (2nd Generation)

No.	Product Name/ Specification	Product Drawing	3D Product Model
1	KYN.5XJ.363.010.6X2 Flat Steel Earthing Interlock (Cabinet Depth 1450mm)		
2	KYN.5XJ.239.012 Front Lower Door Interlock		
3	Motorized Earthing Interlock And Motorized components (For Different Earthing Interlock Configurations, Contact Technical Support)		
4	Aluminum Guide Rails, Left/Right KYN.5XJ.260.132/HTL Left Guide Rail KYN.5XJ.260.133/HTL Right Guide Rail Designed to meet IP2X		
5	Guide Rail Interlock KYN.5XJ.363.031 (VS1) KYN.5XJ.363.031.1 (VD4)		

No.	Product Name/ Specification	Product Drawing	3D Product Model
6	Low-Current Shutter Mechanism 5XS.320.010/WK (VS1) Or (VD4) Shutter Plate With Powder Coating RAL7035 /Without lettering		
7	High-Current Shutter Mechanism 5XS.320.011/WK Insulated Shutter Plate Without Lettering		
8	Shutter Self-Locking Mechanism (Mounting Holes Available With 2-Hole and 3-Hole Options)		
9	Secondary Socket Interlock 5XS.573.010 (Height To Be Confirmed)		
10	KYN.5XJ.259.004.245 Emergency Trip Device (Length)		





# XING JI HONOR

公司荣誉

资质认证  
Qualification Certification

热烈祝贺兴机电器有限公司  
获评国家工信部  
专精特新“小巨人”企业

中共温州市委  
温州市人民政府  
二〇二一年九月

兴机电器集团有限公司

浙江省绿色低碳工厂

浙江省经济和信息化厅  
二〇二四年八月



国家高新技术企业

企业名称: 兴机电器有限公司  
证书编号: GR201932003786  
发证时间: 2019年12月4日  
有效期至: 三年  
批准机关: 浙江省科学技术厅 浙江省财政厅 国家税务总局浙江省税务局

温州兴机电器有限公司  
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热烈祝贺兴机电器有限公司  
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中共温州市委  
温州市人民政府  
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二〇一八年十一月

温州兴机电器有限公司

浙江省博士后工作站

浙江省人力资源和社会保障厅  
二〇一六年二月

兴机电器配件  
省级高新技术企业研究开发中心

浙江省科学技术厅  
二〇一五年九月

浙江省  
企业技术中心

浙江省经济和信息化委员会 浙江省财政厅  
浙江省国家税务局  
浙江省地方税务局 中华人民共和国杭州海关

浙江省第三批上云  
标杆企业

浙江省经济和信息化厅

01	02	03	04
中国机械工业 科学技术奖 China machinery industry science and Technology Award	浙江省服务型制造 示范企业 Zhejiang service-oriented manufacturing demonstration enterprise	企业信用评价 AAA级信用企业 Enterprise Credit Evaluation AAA credit enterprise	温州市关键技术攻坚 示范企业 Wenzhou key technology demonstration enterprise
05	06	07	
温州市级研发投入优秀企业 Wenzhou credit management demonstration enterprise	浙江省级工业互联网平台优秀企业 Excellent enterprise of Zhejiang Provincial Industrial Internet platform	温州市信用管理示范企业 Wenzhou Municipal R & D investment excellent enterprise	

