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- Continuous product development and ongoing technical innovation...

 Cherish resources and be kind to the environment



LEADING TECHNOLOGY TO CREATE THE FUTURE **Product Selection Guide**

Professional manufacturer of
High-voltage components



ZHEJIANG YINGCHUANG ELECTRIC CO.,LTD.

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Yueqing City, Zhejiang Province

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ZHEJIANG YINGCHUANG ELECTRIC CO.,LTD.



Company Profile

Zhejiang Yingchuang Electric Co., Ltd. mainly engages in the research and development, manufacturing, processing, and sales of indoor and outdoor high-voltage vacuum circuit breakers and accessories, indoor and outdoor isolation switches, grounding switches, load switches, drop type fuses, lightning arresters, high and low voltage electrical appliances and accessories, electrical complete sets, instruments and meters, wires and cables, mining electrical appliances, building electrical, transformers, distribution switch control equipment, hardware, plastic parts, and insulation parts; Mechanical processing and sales of copper, iron, and aluminum parts; Import and export of goods and technology.

The company adheres to the management philosophy of "people-oriented" and adheres to the principles of "only by ability, survival of the fittest, integrity, fairness and openness". The corporate spirit of "seeking truth and innovation, keeping pace with the times, and caring for customers" runs through the training process of employees, providing them with a career platform to fully showcase their personal talents.



Leading technology to
create the future

Enterprise Philosophy

Adhering to high-quality development and implementing precision management, the company focuses on smart power as its core business, while paying close attention to the power industry demands in sectors such as environmental protection, transportation, military, and clean power. By continuously enhancing its comprehensive strengths, the company strives to build a reliable brand in the high-voltage electrical equipment industry.

Corporate Vision

Building a Reliable Brand in
the High-Voltage Electrical Industry

Corporate Values

Creating value for the country,
for society, and for customers

Development Philosophy

Quality as foundation, t
echnology for prosperity

Brand Philosophy

Details forge a brand

Quality Philosophy

Quality is character, quality is life

Service Philosophy

Serving customers is achieving oneself





Company Profile

Zhejiang Yingchuang Electric Co., Ltd. mainly engages in the research and development, manufacturing, processing, and sales of indoor and outdoor high-voltage vacuum circuit breakers and accessories, indoor and outdoor isolation switches, grounding switches, load switches, drop type fuses, lightning arresters, high and low voltage electrical appliances and accessories, electrical complete sets, instruments and meters, wires and cables, mining electrical appliances, building electrical, transformers, distribution switch control equipment, hardware, plastic parts, and insulation parts; Mechanical processing and sales of copper, iron, and aluminum parts; Import and export of goods and technology.

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Production Workshop

Advanced production equipment, scientific manufacturing processes, a strict quality system, and a rigorous raw material procurement system ensure that the product quality of Yingchuang Electric has long been at the forefront of the industry.

In production, we uphold the spirit of craftsmanship, striving for excellence and perfection in every product detail.

At Yingchuang, we not only guarantee to provide you with products of excellent cost performance, a complete range, and reliable quality, but also bring you an energy-saving and environmentally friendly power supply environment.

Because Yingchuang's products comply with national quality, energy-saving, safety, and environmental protection standards, and the quality of some products has even reached or exceeded the level of similar European products.

We meticulously craft for the sake of quality

Win the market with integrity, build the brand with quality. We firmly believe that a "brand" is not just a trademark or a product, but a reflection of quality. It maintains consumers' trust in the enterprise through excellent quality. Making users satisfied is our constant pursuit.



CNYCELE®
迎创电气

Leading technology to
create the future





product Catalog

application Area

Rich product range, wide range of applications

We have always been committed to the field of high-voltage intelligent electrical systems, serving the power industry and ensuring grid safety.

Provide users with safe, reliable and high-performance products.

Various high-voltage components and solutions are widely used in power plants, power grids, petrochemical plants, mining, industrial manufacturing, rail transit, data centers, commercial buildings, residential housing, renewable energy and many other industries.

- 01 VYC (VS1) -12 Modular high voltage vacuum circuit breaker
- 02 VYC(VS1)-12 Indoor enclosed column type vacuum circuit breaker
- 03 VYC(VS1)-12 Indoor high voltage vacuum circuit breaker
- 04 VYC(VS1)-12 Indoor (equipped with 550 wide/650 wide central cabinet) vacuum circuit breaker
- 05 VZF(R)-12 Solid-sealed center-mounted vacuum load switch (fuse combination device)
- 06 YCZ-12GD Indoor High Voltage Three position Vacuum Circuit Breaker
- 07 VYC(VS1)-12 Type indoor side-mounted vacuum circuit breaker
- 08 VYC-24 Indoor high voltage vacuum circuit breaker
- 09 ZN85-40.5 Indoor high voltage vacuum circuit breaker (floor-standing)
- 10 ZN85-40.5 Indoor high-voltage vacuum circuit breaker (fixed type)
- 11 FKN12-12RD Compressor load switch (fuse combiner)
- 12 FZRN25-12RD Indoor vacuum load switch (fuse combination)
- 13 YCV21-40.5 (New Energy) Integrated Encapsulated Three-in-One (Five-in-One) Vacuum Circuit Breaker

- 14 GN19-12 Indoor high voltage isolation switch
- 15 GN30-12 Indoor Rotary High Voltage Disconnect Switch
- 16 GN38-12 indoor high-voltage isolation switch
- 17 JN15-12/31.5 Indoor high voltage grounding switch
- 18 ZW32-12 One- and two-time integrated pole-mounted vacuum circuit breaker (State Grid)
- 19 ZW20-12 One- and Two-time Integrated Pole-mounted Vacuum Circuit Breaker Automation Complete Set (China Southern Power Grid)
- 20 FZW28-12F Column mounted vacuum load switch
- 21 ZW32F-12(G) Type outdoor AC high voltage boundary vacuum circuit breaker
- 22 ZW32-24 Outdoor high voltage vacuum circuit breaker
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- 24 ZW43-12 Outdoor high voltage vacuum circuit breaker
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- 26 YCF-12 Inflatable cabinet load switch

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- 32 ZW32-11 Export-type automatic recloser
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- 34 ZW32-33 Export-type automatic recloser
- 35 YCGWF-40.5kV Outdoor High-Voltage Disconnecting Switch (Export Type)
- 35 YCND-1-10 II /400A Load Disconnect Switch (Export Type)
- 36 YC3-10CD/630A、YC3-10D/630A Indoor high voltage disconnect (Export Type)
- 36 YC(F)3-12D Load switch (Export Type)

- 37 S13-M Fully sealed oil immersed power transformer
- 38 S11/S13-35kV Series oil-immersed power transformers
- 39 D11 Single-phase oil-immersed distribution transformer
- 40 SC(B)10 Epoxy resin cast dry-type transformer
- 41 SCBH Three-phase dry-type amorphous alloy core distribution transformer
- 42 SG(B)10H Environmentally friendly dry-type transformer
- 43 YCXGN-12 Solid full insulation closed loop switching equipment
- 44 YCXGN□-12 Fully insulated inflatable ring network switchgear
- 45 YCXGN-12(C、F、V) Environmental gas insulated metal-enclosed switchgear
- 46 YCXGN□-12 AC high voltage metal-enclosed ring network switchgear
- 47 KYN28-12 AC metal-armored removable switchgear
- 48 GIS-40.5kV SF6 Gas insulated switchgear
- 49 YCHX(DFW)-12 box type outdoor switch station
- 50 DFW European style cable branch box

Business License, Corporate Honor Certificates



Three-System Certification Certificates



Zhejiang Provincial Sci-tech Small And Medium-sized Enterprise、
Energy Management Systems Certificate



AAA Credit Rating Certificate for Enterprises



Utility Model Patent Certificate



Evaluation Report



Evaluation Report



Evaluation Report



Green Electricity Certificate Transaction Proof, Software Copyright Registration, Test Report Certificate



Test and Inspection Report Certificate

检测报告
CEPRI-014-2025-113

样品名称: 一二次融合成套柱上断路器、配电自动化终端
样品型号: ZW32-12/630-20, SQ6030
生产单位: 浙江迎创电气有限公司、北京三清五联科技股份有限公司
委托单位: 浙江迎创电气有限公司
检测类别: 委托试验

中国电力科学研究院有限公司
2025年03月12日

检验报告
CHPTL
AQIC No. 244817

样品型号: ZW32-12/630-20型
样品名称: 一二次融合成套柱上断路器(电容柜型)
委托单位: 浙江迎创电气有限公司
制造单位: 浙江迎创电气有限公司
检测类别: 型式试验

辽宁高压电器产品质量检测有限公司
机械工业大连市产品质量检测中心

检验报告
Test Report
CHPTL
AQIC No. 214104

样品型号: ZW32-12/630-20型
样品名称: 一二次融合成套柱上断路器
委托单位: 浙江迎创电气有限公司
制造单位: 浙江迎创电气有限公司
检测类别: 型式试验

机械工业大连市产品质量检测中心
High Voltage Apparatus Quality Test Center of Machinery Industry
THE PEOPLE'S REPUBLIC OF CHINA

Inspection Report Certificate

检验报告
CNYCELE

样品名称: 户内高压真空断路器
委托单位: 浙江迎创电气有限公司
委托单位地址: 浙江省温州市乐清市柳市镇后工业区后街88号5号楼
产品型号: VVC(VS1)-12/1250-31.5
发布日期: 2025.01.06

深圳市京立安检测有限公司

检验报告
CHPTL
XIHARI No. 1854250

样品型号: ZW32(VS1)-12/1250-31.5
样品名称: 户内高压真空断路器
委托单位: 浙江迎创电气有限公司
制造单位: 浙江迎创电气有限公司
检测类别: 型式试验

西安高压电器研究院有限责任公司

检验报告
CNYCELE

样品名称: 户内高压真空断路器
委托单位: 浙江迎创电气有限公司
委托单位地址: 浙江省温州市乐清市柳市镇后工业区后街88号5号楼
产品型号: VVC(VS1)-12/1250-31.5
发布日期: 2025.01.07

深圳市京立安检测有限公司

检验报告
CHPTL
XIHARI No. 1854236

样品型号: ZW32-12/630-20
样品名称: 户外高压真空断路器
委托单位: 浙江迎创电气有限公司
制造单位: 浙江迎创电气有限公司
检测类别: 型式试验

西安高压电器研究院有限责任公司

检验报告
(本报告未经允许不得部分复制)
TECC 中睦检测

委托单位: 浙江迎创电气有限公司
委托单位地址: 浙江省温州市乐清市柳市镇后工业区后街88号5号楼
产品名称: 户外高压真空断路器
产品型号: ZW32-12/630-20
检测类别: 型式试验

报告日期: 2025年10月26日
检测类别: 型式试验

甘肃中睦国信计量检测有限公司

检验报告
CHPTL
XIHARI No. 1854240

样品型号: ZW32-12/630-20
样品名称: 户外高压真空断路器
委托单位: 浙江迎创电气有限公司
制造单位: 浙江迎创电气有限公司
检测类别: 型式试验

西安高压电器研究院有限责任公司

检验报告
(本报告未经允许不得部分复制)
TECC 中睦检测

委托单位: 浙江迎创电气有限公司
委托单位地址: 浙江省温州市乐清市柳市镇后工业区后街88号5号楼
产品名称: 户内高压真空断路器
产品型号: VVC(VS1)-12/1250-31.5
检测类别: 型式试验

报告日期: 2025年12月10日
检测类别: 型式试验

甘肃中睦国信计量检测有限公司

检验报告
CNYCELE

样品名称: 中置柜式真空断路器-熔断器组合电器
委托单位: 浙江迎创电气有限公司
委托单位地址: 浙江省温州市乐清市柳市镇后工业区后街88号5号楼
产品型号: ZW32-12/1250-31.5
发布日期: 2025.01.06

深圳市京立安检测有限公司

检验报告
CHPTL
XIHARI No. 1854247

样品名称: 户内高压真空断路器
产品型号: VVC(VS1)-24/1250-31.5
委托单位: 浙江迎创电气有限公司
检测类别: 型式试验

甘肃中睦国信计量检测有限公司

Inspection Report Certificate

东立安检测

报告编号: 202508070008

检验报告

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产品名称: 户内高压真空断路器

委托单位: 浙江迎创电气有限公司

委托单位地址: 浙江省温州市乐清市城南镇后工业区东港路88号5号楼

产品型号: ZVC(2505)-40.5/4000-40

发布日期: 2025.01.06

深圳市东立安检测有限公司

中格通检测

报告编号: 20240120181306

检验报告

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委托单位: 浙江迎创电气有限公司

委托单位地址: 浙江省温州市乐清市城南镇后工业区东港路88号5号楼

产品名称: 户内高压真空断路器

主型号: ZVC(2505)-40.5/4000-40

检测单位: 湖南中格通检测有限公司

检测日期: 2025年12月06日

检测类别: 型式试验

PLK80m

中格通检测

报告编号: 20240120181306

检验报告

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委托单位: 浙江迎创电气有限公司

委托单位地址: 浙江省温州市乐清市城南镇后工业区东港路88号5号楼

产品名称: 户内高压真空断路器

主型号: ZVC(2505)-40.5/4000-40

检测单位: 湖南中格通检测有限公司

检测日期: 2025年12月06日

检测类别: 型式试验

plY50m

Agz24.6

Inspection Report Certificate

检验报告

Test Report

No.2025022502200022

产品名称: 户外高压真空断路器

产品型号: YC600-12/630-25

委托单位: 浙江迎创电气有限公司

检测类别: 型式试验

甘肃中测国信计量检测有限公司

检验报告

Test Report

No.20250103200006

产品名称: 户外高压真空断路器

产品型号: YC600-12/630-25

委托单位: 浙江迎创电气有限公司

检测类别: 型式试验

甘肃中测国信计量检测有限公司

检验报告

TEST REPORT

Report No.: 2026XHT03116

产品名称: 户外高压真空断路器

产品型号: KYN28-12/1250-31.5

委托单位: 浙江迎创电气有限公司

检测类别: 型式试验

中国兴华电器科学研究院有限公司

检验报告

TEST REPORT

Report No.: 2026XHT04122

产品名称: 户外高压真空断路器

产品型号: YC600-12/630-25

委托单位: 浙江迎创电气有限公司

检测类别: 型式试验

中国兴华电器科学研究院有限公司

检验报告

TEST REPORT

Report No.: 2026XHT04123

产品名称: 户外高压真空断路器

产品型号: YC600-12/630-25

委托单位: 浙江迎创电气有限公司

检测类别: 型式试验

中国兴华电器科学研究院有限公司

检验报告

TEST REPORT

Report No.: 2026XHT04124

产品名称: 户外高压真空断路器

产品型号: YC600-12/630-25

委托单位: 浙江迎创电气有限公司

检测类别: 型式试验

中国兴华电器科学研究院有限公司

NEIC

报告编号: BG19071329

检验报告

TEST REPORT

样品名称: 户内高压真空断路器

型号: FKN12-12D/T125-31.5

委托单位: 浙江迎创电气有限公司

国家高压电器质量监督检验中心

NEIC

报告编号: BG19071321

检验报告

TEST REPORT

样品名称: 户内高压真空断路器

型号: FKN12-12D/T125-31.5

委托单位: 浙江迎创电气有限公司

国家高压电器质量监督检验中心

检验报告

TEST REPORT

样品名称: 户内高压真空断路器

型号: FKN12-12D/T125-31.5

委托单位: 浙江迎创电气有限公司

国家高压电器质量监督检验中心

检验报告

TEST REPORT

样品名称: 户内高压真空断路器

型号: FKN12-12D/T125-31.5

委托单位: 浙江迎创电气有限公司

国家高压电器质量监督检验中心

检验报告

TEST REPORT

Report No.: 2026XHT03117

产品名称: 户外高压真空断路器

产品型号: YC600-12/630-25

委托单位: 浙江迎创电气有限公司

检测类别: 型式试验

中国兴华电器科学研究院有限公司

检验报告

TEST REPORT

Report No.: 2026XHT04122

产品名称: 户外高压真空断路器

产品型号: YC600-12/630-25

委托单位: 浙江迎创电气有限公司

检测类别: 型式试验

中国兴华电器科学研究院有限公司

检验报告

TEST REPORT

Report No.: 2026XHT04123

产品名称: 户外高压真空断路器

产品型号: YC600-12/630-25

委托单位: 浙江迎创电气有限公司

检测类别: 型式试验

中国兴华电器科学研究院有限公司

检验报告

TEST REPORT

Report No.: 2026XHT04124

产品名称: 户外高压真空断路器

产品型号: YC600-12/630-25

委托单位: 浙江迎创电气有限公司

检测类别: 型式试验

中国兴华电器科学研究院有限公司

VYC (VS1) -12 Modular high voltage vacuum circuit breaker



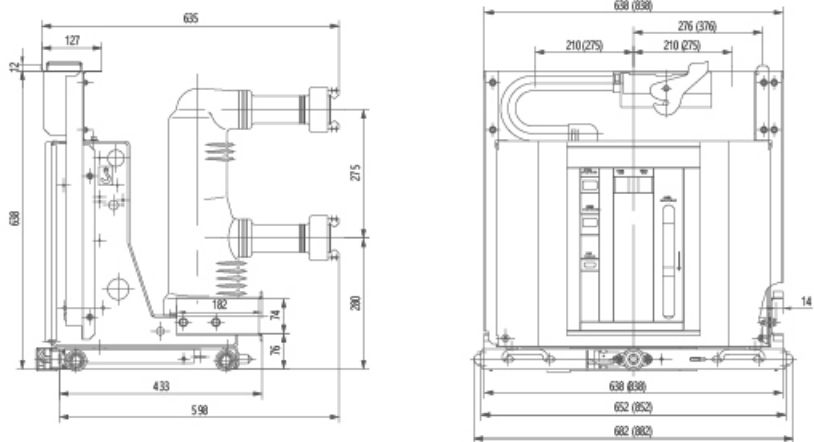
Product Overview

VYC (VS1) -12 Modular high voltage vacuum circuit breaker is suitable for three-phase AC power systems with a rated voltage of 12 kV and a frequency of 50 Hz. It can be widely used for the control and protection of electrical facilities in power plants, substations, petrochemical plants, metallurgical facilities, manufacturing industries, airports, residential communities, and similar applications. This circuit breaker is particularly well-suited for locations requiring frequent operation under rated current or repeated interruption of short-circuit currents. It can be installed in indoor air-insulated switchgear (such as KYN28, KYN96, etc.) as a matching component.

Technical Specifications

Item	Unit	Parameter
Rated Voltage	kV	12
Rated Frequency	Hz	50
Rated Insulation Level	kV	1min Power Frequency Withstand Voltage (RMS, Phase to Phase, Phase to Earth, Vacuum Interrupter)
		Lightning Impulse Withstand Voltage (Peak, Phase to Phase, Phase to Earth, Vacuum Interrupter)
Rated Current	A	42
		75
		630
		630
		1250
		1600
Rated Short-Circuit Breaking Current	kA	1250
		1250
		1600
		2000
Rated Short-Time (4s) Withstand Current	kA	2000
		2500
		2500
		3150
Rated Short-Circuit Making Current	kA	4000
		20
		25
		31.5
Rated Peak Withstand Current	kA	40
		20
		25
		31.5
Rated Operating Sequence	Times	50
		63
		80
		100
Rated number of short-circuit breaking operations	Times	50
		63
		80
		100
Rated Cable Charging Breaking Current	A	0-0.3s-CO-180s-CO、O-180s-CO-180s-CO(40kA)
		30/20(40kA)
		25
		1000

Installation Dimensions Diagram



VYC(VS1)-12 Indoor enclosed column type vacuum circuit breaker



Product Overview

VYC(VS1)-12 Indoor enclosed column type vacuum circuit breaker is an indoor switching device for three-phase AC 50 Hz power systems with a rated voltage of 12 kV. It serves as a protection and control unit for power grid equipment and industrial/mining power devices. This circuit breaker is particularly suitable for locations requiring frequent operation under rated operating current or repeated interruption of short-circuit currents. The circuit breaker features an integrated design combining the operating mechanism and the breaker body. It can be used either as a fixed-mounted unit or equipped with a dedicated propulsion mechanism to form a withdrawable (draw-out) truck unit.

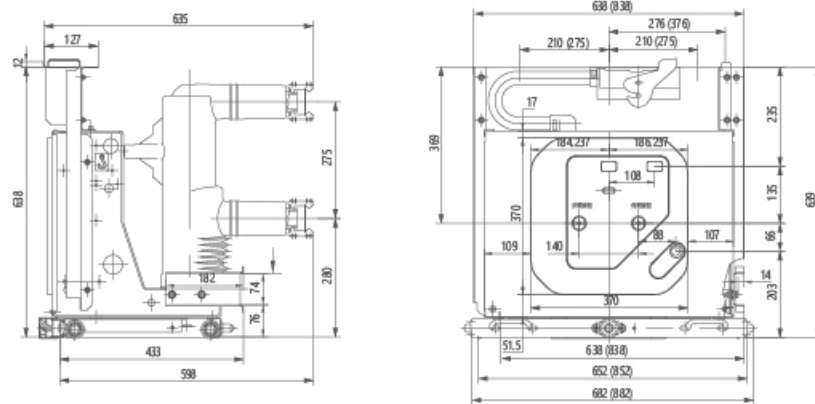
Performance Advantages

This product is equipped with a bistable permanent magnetic operating mechanism. The mechanism contains permanent magnets that provide holding force to keep the switch in the closed or open position. Compared with conventional spring operating mechanisms, the number of mechanical parts is greatly reduced, and the mechanical transmission chain is shortened, thereby significantly improving the switch reliability and greatly extending its mechanical life.

Technical Specifications

Item	Unit	Parameter
Rated Voltage	kV	12
Rated Frequency	Hz	50
Rated Insulation Level	kV	1min Power Frequency Withstand Voltage
		Lightning Impulse Withstand Voltage (Peak)
Rated Short-Circuit Breaking Current	kA	Phase to earth / Phase to phase: 42/48
		Phase to earth / Phase to phase: 75/85
Rated Current	A	20
		25
		31.5
		40
Rated Short-Time Withstand Current (RMS)	kA	630
		630
		1250、1600
		1250、1600
Rated Peak Withstand Current (Peak)	kA	2000、2500
		2000、2500
		2000、2500
		2000、2500
Rated Short-Circuit Making Current (Peak)	kA	20
		25
		31.5
		40
Rated Short-Circuit Current Duration	S	50
		63
		80
		100
Rated Short-Circuit Current Duration	S	50
		63
		80
		100
Rated Short-Circuit Current Duration	S	4
		4
		4
		4
Rated Short-Circuit Current Duration	S	20000
		20000
		20000
		20000
Rated Short-Circuit Current Duration	S	2000
		2000
		2000
		2000
Rated Short-Circuit Current Duration	S	O - t - CO - t1 - CO
		O - t - CO - t1 - CO
		O - t - CO - t1 - CO
		O - t - CO - t1 - CO

Installation Dimensions Diagram



VYC(VS1)-12 Indoor high voltage vacuum circuit breaker



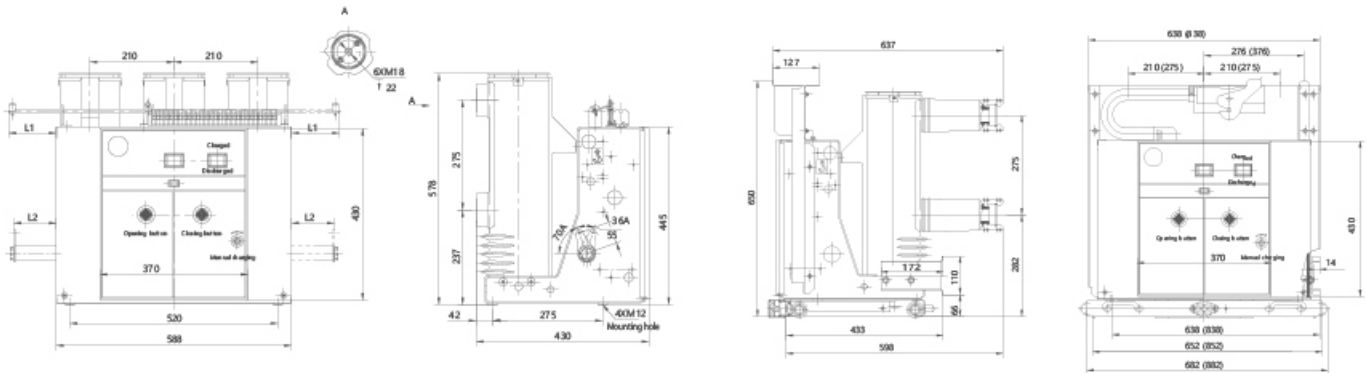
Product Overview

VYC(VS1)-12 Indoor High-Voltage Vacuum Circuit Breaker is an indoor high-voltage switchgear for three-phase AC 50Hz, rated voltage 12kV. It can serve as a protection and control unit for power equipment in industrial and mining enterprises. The circuit breaker adopts an integrated design of the spring operating mechanism and the breaker body. It can be used as a fixed-mounted unit or combined with a chassis truck to form a withdrawable unit.

Technical Specifications

Item	Unit	Parameter			
Rated Voltage	kV	12			
Rated Frequency	Hz	50			
Rated Insulation Level	kV	1min Power Frequency Withstand Voltage		42	
		Lightning Impulse Withstand Voltage		75	
Rated Current	A	630	630	1250	1600
		1250	1250	1600	2000
				2000	2500
				2500	3150
					4000
Rated Short-Circuit Breaking Current	kA	20	25	31.5	40
Rated Short-Time Withstand Current (Rated Short-Time Thermal Withstand Current)		20	25	31.5	40
Rated Short-Circuit Making Current		50	63	80	100
Rated Peak Withstand Current (Rated Dynamic Withstand Current)		50	63	80	100
Rated Short-Circuit Duration (Rated Thermal Withstand Duration)	S	4			
Rated Operating Sequence		O - 0.3s - CO - 180s - CO O - 180s - CO - 180s - CO (40kA)			
Rated Number of Short-Circuit Breaking Operations	Times	30/20 operations (40kA)			
Mechanical Life	Times	10000			

Installation Dimensions Diagram



Outline Dimension Drawing of 12kV Fixed Type VYC (VS1) Circuit Breaker - 800mm Width

Outline Dimension Drawing of 12kV Withdrawable Type VYC (VS1) Circuit Breaker - 800mm Width
(Dimensions in brackets are for 1000mm wide cabinet with small current and phase spacing of 275mm)

VYC(VS1)-12 Indoor (equipped with 550 wide/650 wide central cabinet) vacuum circuit breaker

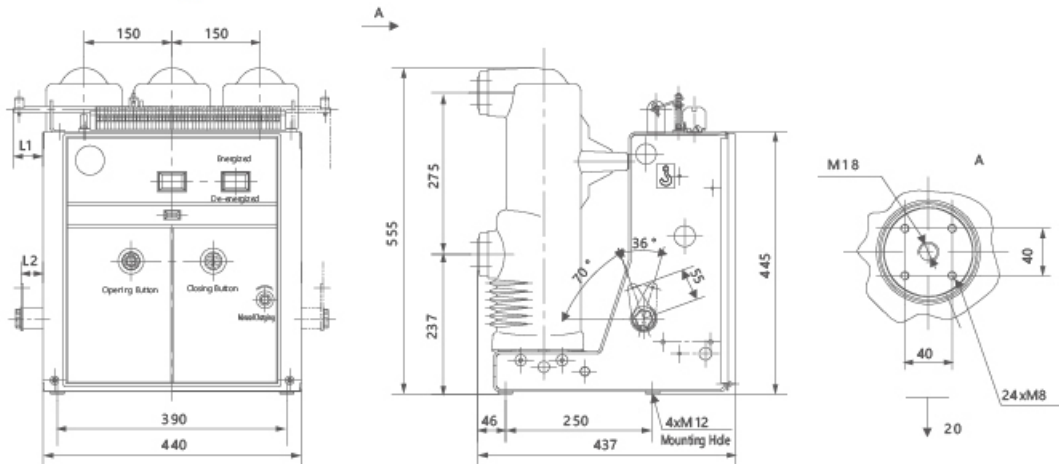
Product Overview

VYC(VS1)-12 Indoor Vacuum Circuit Breaker (for 550mm/650mm wide center-mounted switchgear) adopts a solid insulation structure. Utilizing advanced epoxy encapsulation technology, it organically integrates the vacuum interrupter, main circuit components, and insulating supports into a single integrated solid-sealed pole. This fundamentally solves the environmental tolerance issues of vacuum circuit breakers, making them suitable for a wider range of applications. The integrated solid-sealed pole incorporates a self-convection ventilation technology, which cleverly addresses the heat dissipation difficulty associated with solid insulation structures.

Technical Specifications

Item	Unit	Parameter		
Rated Voltage	kV	12		
Rated Frequency	Hz	50		
Rated Current	A	630-1250		1250-1600
Rated Short-Circuit Breaking Current	kA	20	25	31.5
Rated Short-Circuit Making Current	kA	50	63	80
Rated Peak Withstand Current	kA	50	63	80
4s Rated Short-Circuit Withstand Current	kA	20	25	31.5
Rated Insulation Level	kV	Power Frequency Withstand Voltage (Before and After Rated Breaking)		42 (Phase to phase, phase to earth) / 48 (Fracture) RMS
		Impulse Withstand Voltage (Before and After Rated Breaking)		75 (Phase to phase, phase to earth) / 85 (Fracture) Peak
Rated Operating Sequence	Times	O - 0.3s - CO - 180s - CO		
Mechanical Life	Times	20000		
Rated Number of Short-Circuit Breaking Operations	V	50		
Rated Closing Voltage of Operating Mechanism (DC)	V	AC/DC 110、220		
Rated Opening Voltage of Operating Mechanism (DC)	mm	AC/DC 110、220		
Contact Gap (or Contact Opening Distance)	mm	9±1		
Overtravel (Contact Spring Compression Length)	ms	3.5±0.5		
Three-Phase Opening and Closing Bounce Time	ms	≤ 2		
Contact Closing Bounce Time	m/s	≤ 2		

Installation Dimensions Diagram



VZF(R)-12 Solid-sealed center-mounted vacuum load switch (fuse combination device)



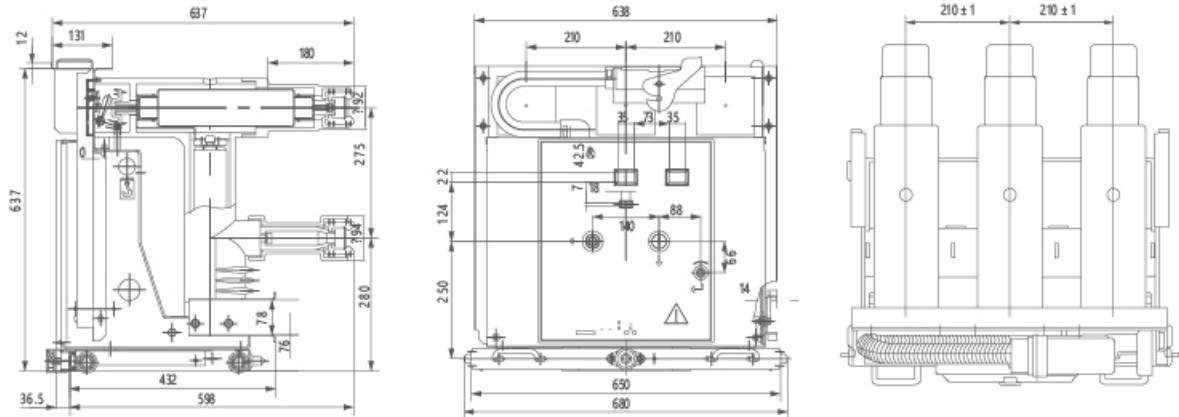
Product Overview

VZF(R)-12 Solid-Sealed Center-Mounted Vacuum Load Switch-Fuse Combination Electrical Apparatus (hereinafter referred to as the vacuum switch) is a new generation of vacuum switch equipment developed based on a unique design concept and in response to market demand. It is widely used in indoor armored air-insulated switchgear. It complies with the requirements of standards such as GB 3804-2004 and GB 16926-1997. Under normal service conditions, as long as the vacuum switch operates within its technical parameter range, it can operate safely and reliably in power grids of the corresponding voltage level.

Technical Specifications

Item	Unit	Parameter	
		VZF-12/T630-20 Vacuum Load Switch	VZF(R)-12/T125-50 Vacuum Load Switch – Fuse Combination Unit
Rated Voltage	kV	12	12
Power Frequency Withstand Voltage (Phase to Phase, Phase to Earth)	kV	42	42
Lightning Impulse Withstand Voltage (Phase to Phase, Phase to Earth)	kV	75	75
Rated Current	A	630	125(Fuse)
Rated Short-Circuit Breaking Current	kA	-	50(Fuse)
Rated Short-Time Withstand Current	kA	20	-
Rated Peak Withstand Current	kA	50	-
Rated Short-Circuit Making Current	kA	50	-
Rated Cable Charging Breaking Current	A	16	-
Rated Transfer Current	A	-	3150
No-Load Transformer Switching	kVA	1250	
Electrical Life	Times	10000	
Partial Discharge Level	PC	≤ 5	

Installation Dimensions Diagram



YCZ-12GD Indoor High Voltage Three position Vacuum Circuit Breaker



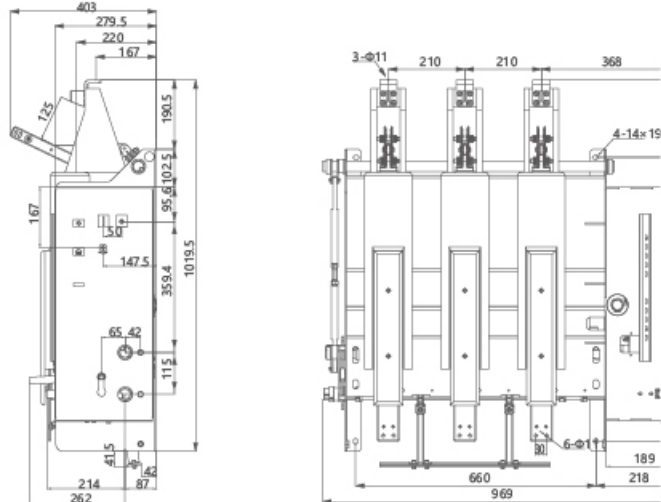
Product Overview

YCZ-12GD Indoor High-Voltage Three-Position Vacuum Circuit Breaker features excellent electrical and mechanical performance, a reliable and stable mechanism, and long service life. The main circuit adopts solid-sealed poles, which improve the environmental adaptability and insulation reliability of the circuit breaker. Reliable mechanical and electronic performance, along with extended mechanical and electrical life, make maintenance-free operation possible. It can be used in 3.6–12kV power systems as a protection and control unit for power grid equipment and power drives in industrial and mining enterprises. It is suitable for loads of various characteristics, frequent operations, and applications requiring repeated interruption of short-circuit currents. The product is equipped with comprehensive mechanical and electrical interlocking devices, providing high operational stability and reliability, ensuring the safety of operators and equipment, as well as electrical safety.

Technical Specifications

Item	Unit	Parameter			
Rated Voltage	kV	12			
(1min) Rated Short-Time Power Frequency Withstand Voltage – Phase to Phase / Break	kV	42/48			
Rated Lightning Impulse Withstand Voltage (Peak) – Phase to Phase / Break	kV	75/85			
Auxiliary Circuit Power Frequency Withstand Voltage (1min)	V	2000			
Rated Frequency	Hz	50			
Rated Current	A	630		1250	
Rated Short-Circuit Breaking Current	kA	20	25	25	31.5
Rated Peak Withstand Current	kA	50	63	63	80
Rated Short-Circuit Making Current	kA	50	63	63	80
4s Rated Short-Time Withstand Current	kA	20	25	25	31.5
Rated Short-Time Withstand Current Duration	s	4			

Installation Dimensions Diagram



VYC(VS1)-12 Type indoor side-mounted vacuum circuit breaker



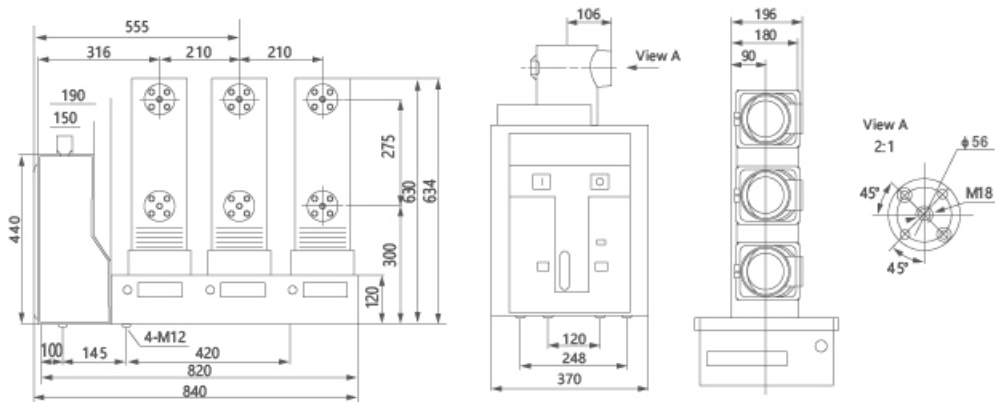
Product Overview

VYC(VS1)-12 Indoor Side-Mounted Vacuum Circuit Breaker is an indoor high-voltage switchgear suitable for use as a protection and control device in three-phase power systems with a rated voltage of 12kV and a frequency of 50Hz. Owing to the special advantages of vacuum circuit breakers, it is particularly suitable for applications requiring frequent operations at rated current or repeated interruption of short-circuit currents. The VYC(VS1)-12 Series Indoor Side-Mounted Vacuum Circuit Breaker adopts a fixed-mounted installation method and is primarily used in fixed-type switchgear. The circuit breaker can be used either as a stand-alone unit or in loop network power supply systems, compact substations, or various non-standard power supply systems.

Technical Specifications

Item		Unit	Parameter		
Rated Voltage		kV	12		
Rated Maximum Operating Voltage		kV	630	630	630
Rated Current		A	1250	1250	1250
Rated Short-Circuit Breaking Current		kA	20	25	31.5
Rated Short-Circuit Making Current		kA	50	63	80
Rated Peak Withstand Current		kA	50	63	80
4s Rated Short-Circuit Withstand Current		kA	20	25	31.5
Rated Insulation Level	Power Frequency Withstand Voltage (Before and After Rated Breaking)	kV	42 (Break 48)		
	Impulse Withstand Voltage (Before and After Rated Breaking)		75 (Break 84)		
Rated Operating Sequence		Times	O - 0.3s - CO - 180s - CO		
Mechanical Life		Times	1000		
Rated Number of Short-Circuit Breaking Operations		V	50		
Rated Closing Voltage of Operating Mechanism (DC)		V	AC/DC 110、220		
Rated Opening Voltage of Operating Mechanism (DC)		mm	AC/DC 110、220		
Contact Gap		mm	11±1		
Overtravel (Contact Spring Compression Length)		ms	3.5±0.5		
Three-Phase Opening and Closing Bounce Time		ms	≤ 2		
Contact Closing Bounce Time		m/s	≤ 2		

Installation Dimensions Diagram



VYC-24 Indoor high voltage vacuum circuit breaker



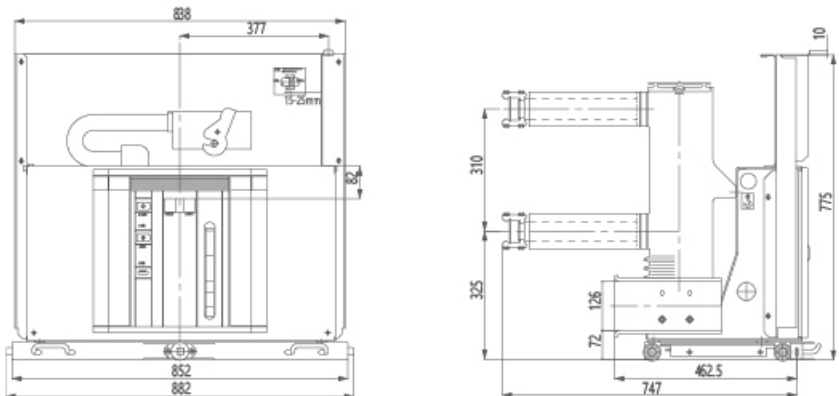
Product Overview

VYC-24 Indoor High-Voltage Vacuum Circuit Breaker is a new-generation series of 24kV vacuum circuit breakers. The main current-carrying circuit primarily adopts solid-sealed poles, and the operating mechanism is optimally designed, significantly improving the insulation reliability, mechanical reliability, and interrupting performance of the circuit breaker. This truly achieves maintenance-free main circuits along with extended mechanical and electrical life. The product is available in a series to meet different application requirements.

Technical Specifications

Item		Unit	Parameter		
Rated Voltage		kV	24		
Rated Insulation Level	1min Power Frequency Withstand Voltage (RMS) (Phase to Phase, Phase to Earth, Vacuum Interrupter)	kV	Phase to Phase, Phase to Earth / Break (or Interrupter)		65/79
	Lightning Impulse Withstand Voltage (Peak) (Phase to Phase, Phase to Earth, Vacuum Interrupter)	kV			125/145
Rated Frequency		Hz	50		
Rated Current		A	630	630	1600
			1250	1250	2000
					2500
					3150
Rated Short-Circuit Breaking Current		kA	20	25	31.5
Rated Short-Time (4s) Withstand Current		kA	20	25	31.5
Rated Short-Circuit Making Current		kA	50	63	80
Rated Peak Withstand Current		kA	50	63	80
Rated Operating Sequence			O-0.3s-CO-180s-CO、O-180s-CO-180s-CO(40kA)		
Rated Number of Short-Circuit Breaking Operations		Times	20		
Rated Cable Charging Breaking Current		A	31.5		
Rated Single Capacitor Bank Breaking Current		A	630		
Rated Back-to-Back Capacitor Bank Breaking Current		A	400		
Mechanical Life		Times	10000		
Allowable Accumulated Wear Thickness of Moving and Fixed Contacts		mm	3		

Installation Dimensions Diagram



Outline Dimension Drawing of 24kV Withdrawable Type ZN63(VS1)-24 Circuit Breaker (800mm) for 1000mm Wide Cabinet (Dimensions in brackets are for the version with embedded pole vacuum interrupters and phase spacing of 210mm)

ZN85-40.5 Indoor high voltage vacuum circuit breaker (floor-standing)



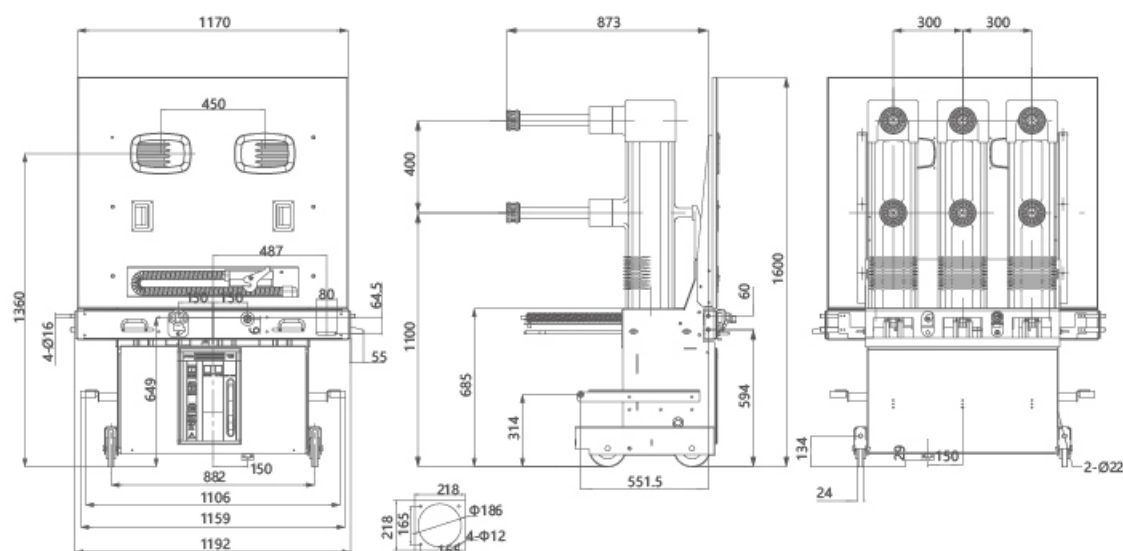
Product Overview

ZN85-40.5 Indoor High-Voltage Vacuum Circuit Breaker (floor-standing) is suitable for indoor high-voltage equipment with a rated voltage of 40.5kV and three-phase AC 50Hz. It can be used in industrial and mining enterprises, power plants, and substations for making and breaking load currents, overload currents, and short-circuit currents, and is also suitable for applications requiring frequent switching operations.

Technical Specifications

Item	Unit	Parameter
Rated Voltage	kV	40.5
Rated Current	A	1250 1600 2000
Rated Frequency	Hz	50
Rated Short-Circuit Breaking Current	kA	25 31.5
Rated Short-Circuit Making Current (Peak)	kA	63 80
4s Rated Short-Time Withstand Current	kA	25 31.5
Rated Peak Withstand Current	kA	63 80
1min Power Frequency Withstand Voltage	kV	95
Lightning Impulse Withstand Voltage (Peak)		185
Rated Operating Sequence		0-0.3s-CO-180s-CO
Rated Number of Short-Circuit Breaking Operations	Times	20
Mechanical Life	Times	10000
Breaking Time	ms	≤ 80
Single Capacitor Bank Breaking Current	A	630
Back-to-Back Capacitor Bank Breaking Current	A	400
Rated Operating Voltage	V	-110/-110, -220/-220

Installation Dimensions Diagram



ZN85-40.5 Indoor high-voltage vacuum circuit breaker (fixed type)



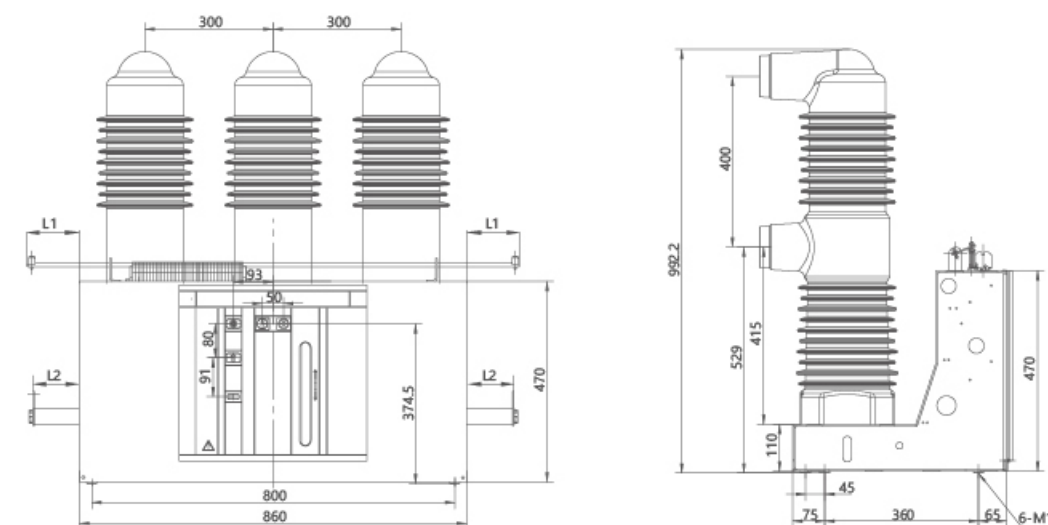
Product Overview

ZN85-40.5 Indoor High-Voltage Vacuum Circuit Breaker (fixed type) is suitable for indoor high-voltage equipment with a rated voltage of 40.5kV and three-phase AC 50Hz. It can be used in industrial and mining enterprises, power plants, and substations for making and breaking load currents, overload currents, and short-circuit currents, and is also suitable for applications requiring frequent switching operations.

Technical Specifications

Item	Unit	Parameter		
Rated Voltage	kV	40.5		
Rated Current	A	1250	1600	2000
Rated Frequency	Hz	50		
Rated Short-Circuit Breaking Current	kA	25	31.5	
Rated Short-Circuit Making Current (Peak)	kA	63	80	
4s Rated Short-Time Withstand Current	kA	25	31.5	
Rated Peak Withstand Current	kA	63	80	
1min Power Frequency Withstand Voltage	kV	95		
Lightning Impulse Withstand Voltage (Peak)		185		
Rated Operating Sequence		O-0.3s-CO-180s-CO		
Rated Number of Short-Circuit Breaking Operations	Times	20		
Mechanical Life	Times	10000		
Breaking Time	ms	≤ 80		
Single Capacitor Bank Breaking Current	A	630		
Back-to-Back Capacitor Bank Breaking Current	A	400		
Rated Operating Voltage	V	-110/~110, -220/~220		

Installation Dimensions Diagram



FKN12-12RD Compressor load switch (fuse combiner)



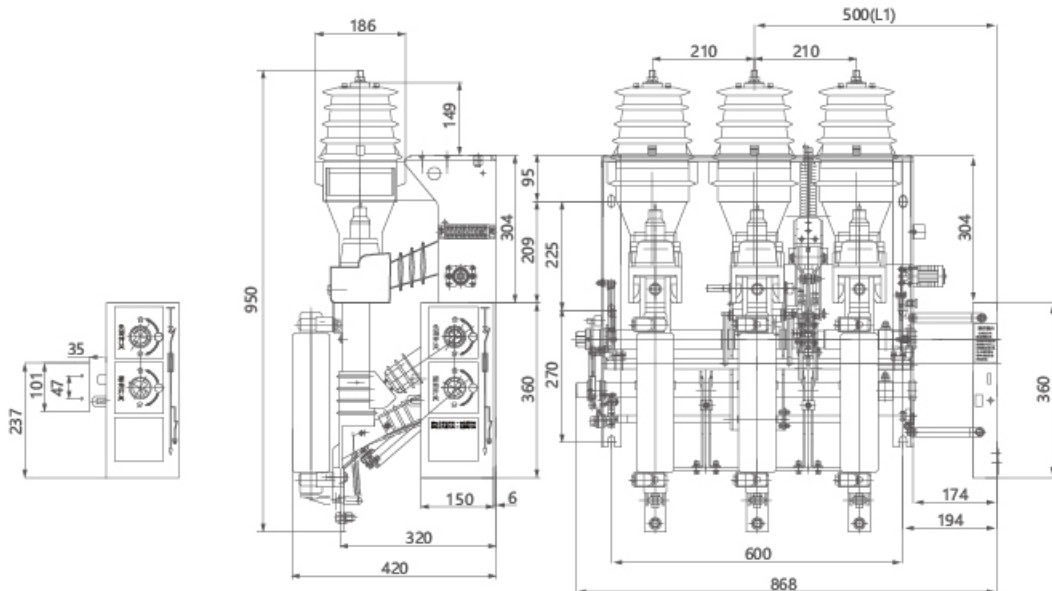
Product Overview

FKN12-12RD Compressor load switch and FKN12-12RD Compressor load switch-fuse combiner are suitable for use in three-phase power distribution systems of 12kV and below, as control and protection for power equipment such as transformers, cables, and overhead lines. They are particularly suitable for terminal substations and compact substations in urban and rural power distribution networks. They are also applicable for control and protection in loop network and double-radial power supply units.

Technical Specifications

Item	Unit	FKN12-12/630	FKNR12-12/100-31.5
Rated Voltage	kV	12	
Rated Frequency	Hz	50	
Rated Current	A		
Lightning Impulse Withstand Voltage	kV	Phase to earth and phase to phase: 75, isolating break: 85	
1min Power Frequency Withstand Voltage	kV	Phase to earth and phase to phase: 42, isolating break: 48	
Rated Thermal Withstand Current	kA	20(4S)	
Rated Dynamic Withstand Current	kA	50	
Rated Short-Circuit Making Current (Peak)	kA	50	
Rated Short-Circuit Breaking Current (Prospective Value)	kA	31.5	
Rated Transfer Current	kA	1.5	
No-Load Transformer Breaking Capacity	kVA	1250	
Rated Cable Charging Current	A	10	
Mechanical Life	次	4000	

Installation Dimensions Diagram



FZRN25-12RD Indoor vacuum load switch (fuse combination)



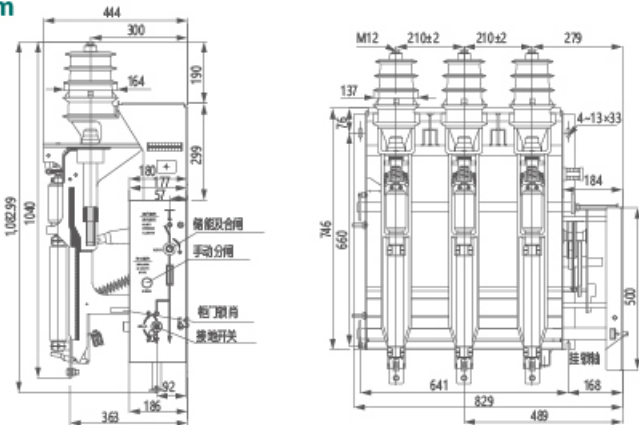
Product Overview

FZRN25-12D Type Vacuum Load Switch and Combination Electrical Apparatus are suitable for use in three-phase AC 50Hz loop networks or terminal power supply systems, as well as in industrial electrical equipment, for load control and short-circuit protection. The load switch makes and breaks load currents, closed-loop currents, no-load transformer currents, and cable charging currents. The combination apparatus can interrupt any current up to the rated short-circuit current. It adopts a direct-drive isolation gap that operates in conjunction with the vacuum interrupter. Both manual and electric operation functions are available.

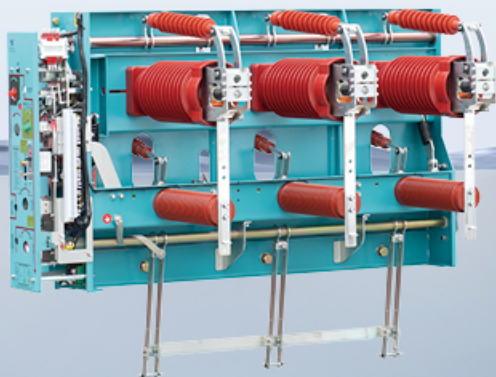
Technical Specifications

Item	Unit	FZRN25-12D/T630-20	FZRN25-12D/T125-31.5
Rated Voltage	kV	12	
Rated Frequency	Hz	50	
Rated Current	A	630	125
Rated Insulation Level	1min Power Frequency Withstand Voltage	kV	Vacuum interrupter break: 30; Phase to earth and phase to phase: 42; Isolating break: 48
	Lightning Impulse Withstand Voltage	kV	Phase to earth and phase to phase: 75; Isolating break: 85
Rated Dynamic Withstand Current (Peak)	kA	50	-
4s Thermal Withstand Current	kA	20	-
Rated Active Load Breaking Current	A	630	125
Rated Closed-Loop Breaking Current	A	630	125
Rated Cable Charging Breaking Current	A	10	10
No-Load Transformer Breaking Capacity	kVA	1250	1250
Rated Short-Circuit Breaking Current	kA	-	31.5
Rated Transfer Current	A	-	870
Fuse Model		-	SDLAJ-12 SFLAJ-12
Striker Output Energy	J	-	2-5(Medium)
Rated Short-Circuit Making Current	kA	50	
Rated Dynamic Withstand Current of Earthing Switch	kA	50	
2s Thermal Withstand Current of Earthing Switch	kA	20	
Rated Auxiliary Circuit Voltage	V	AC/CD220; 110	
Mechanical Life	次	10000	

Installation Dimensions Diagram



YCV21-40.5 (New Energy) Integrated Encapsulated Three-in-One (Five-in-One) Vacuum Circuit Breaker



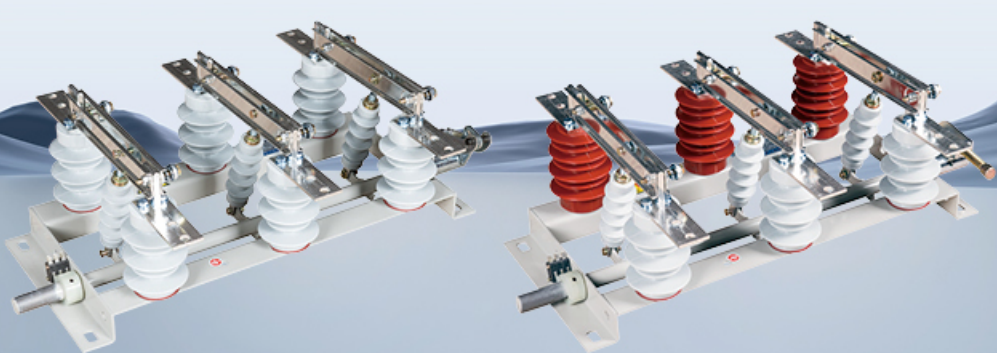
Product Overview

YCV21-40.5 (New Energy) Integrated Encapsulated Three-in-One (Five-in-One) Vacuum Circuit Breaker is suitable for power networks with AC 50Hz and a rated voltage of 35kV. It can interrupt load currents, overload currents, and short-circuit currents. The YCV21-40.5 (New Energy) Integrated Solid-Sealed Three-in-One (Five-in-One) Vacuum Circuit Breaker is specifically designed for 35kV compact substations and small secondary distribution substations. It is particularly suitable for the control and protection of terminal transformers and is the optimal choice for wind turbine power transmission network equipment. The outdoor cable distribution box serves as a transfer point for cable power transmission, used outdoors for controlling, connecting, tapping, branching, or converting cable lines. This series of products features small size, compact structure, easy operation, convenient maintenance, and safe use.

Technical Specifications

Item			Unit	Parameter
Rated Voltage			kV	40.5
Rated Frequency			Hz	50
Rated Current			A	630、1250
Rated Current of Fuse			A	≤ 100
Rated Short-Time Withstand Current			kA	20、25、31.5
Rated Short-Circuit Duration			s	4
Rated Short-Circuit Making Current			kA	50、63、80
Rated Peak Withstand Current			kA	50、63、80
Rated Load Switch Current			A	630、1250
Rated Transfer Breaking Current (with 100A Fuse)			A	2000
Rated Thermal Withstand Current of Disconnecter (RMS, 4s)			kA	20、25、31.5
Rated Dynamic Withstand Current of Disconnecter (Peak)			kA	50、63、80
Rated Thermal Withstand Current of Earthing Switch (RMS, 4s)			kA	20、25、31.5
Rated Dynamic Withstand Current of Earthing Switch (Peak)			kA	50、63、80
Making Current of Earthing Switch			kA	50、63、80
GT17-40.5D Main Circuit Resistance			μΩ	≤ 100
FZ16-40.5D Main Circuit Resistance			μΩ	≤ 200
FZ16-40.5RD Main Circuit Resistance (excluding resistance of the fuse)			μΩ	≤ 400
Opening Time of Fuse Trip Switch			ms	60+10
Rated Breaking Current of Fuse (RMS)			kA	31.5
Rated Insulation Level	1min Power Frequency Withstand Voltage (RMS)	Phase to phase / Phase to earth	kV	95
		Break / Isolating break		95/118
	Lightning Impulse Withstand Voltage (Peak)	Phase to phase / Phase to earth		185
		Break / Isolating break		185/215
Auxiliary circuit 1min power frequency withstand voltage			kV	2
Protection class	XGZ16-40.5(F.R)			IP4X
Three-phase center distance				440/470/500
Mechanical life	Load switch		Times	10000
	Disconnecter			3000
	Earthing switch			3000

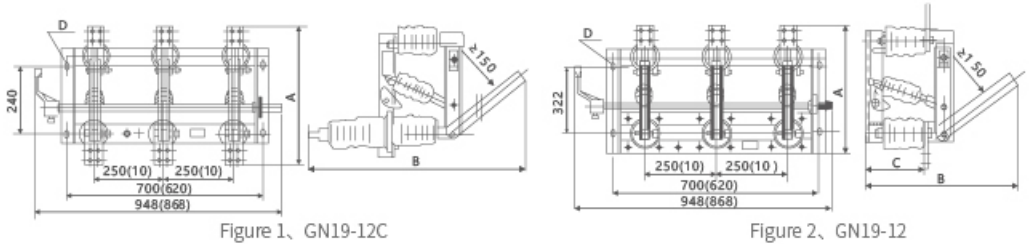
GN19-12 Indoor high voltage isolation switch



Product Overview

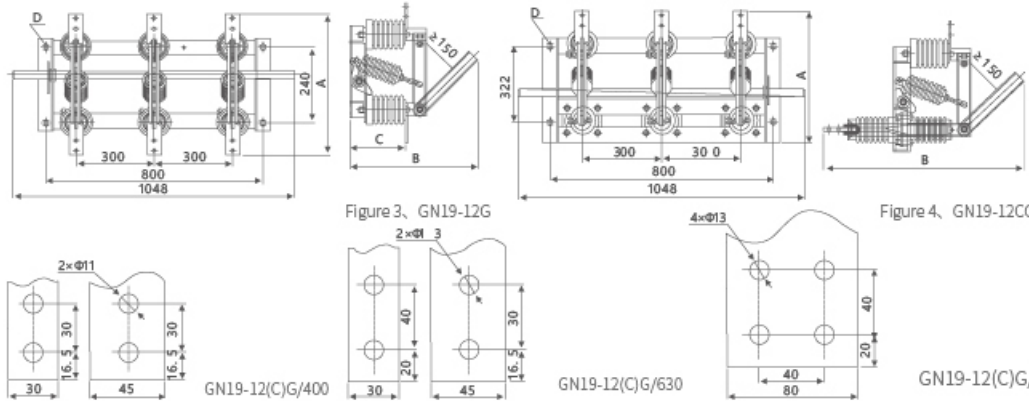
GN19-12 Indoor high voltage isolation switch is a high-voltage switchgear intended for use in power systems with a rated voltage of 12kV, AC 50Hz, and below. Equipped with a CS6-1 manual operating mechanism, it is used to open or close circuits under voltage but without load. Derivative versions are also available, including anti-pollution types, high-altitude types, and those fitted with a live display device.

Installation Dimensions Diagram



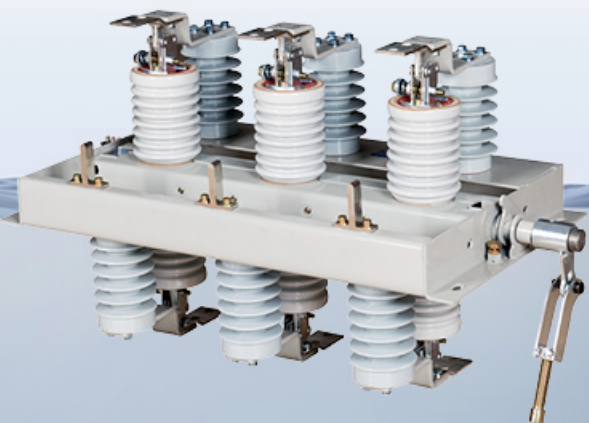
Model	A	B	C	D
GN19-12/400	450	446	185	4-14X24
GN19-12/630	470	446	185	4-14X24
GN19-12/1000/1250	510	500	196	4-18X28
GN19-12C/400	420	690	185	4-14X24
GN19-12C/630	430	690	185	4-14X24
GN19-12C/1000/1250	470	745	196	4-18X28

Note: The phase-to-phase distance of the disconnecting switch is available in specifications such as 210mm, 230mm, 250mm, and 275mm. Custom center distances and mounting dimensions can be provided upon customer request. For any other special requirements, please contact our company for further consultation.



Model	A	B	C	D
GN19-12G/400	532	580	237	4-14X24
GN19-12G/630	572	580	237	4-14X24
GN19-12G/1000/1250	585	635	249	4-18X28
GN19-12CG/400	508	870	237	4-14X24
GN19-12CG/630	547	890	237	4-14X24
GN19-12CG/1000/1250	550	950	249	4-18X28

GN30-12 Indoor Rotary High Voltage Disconnect Switch



Product Overview

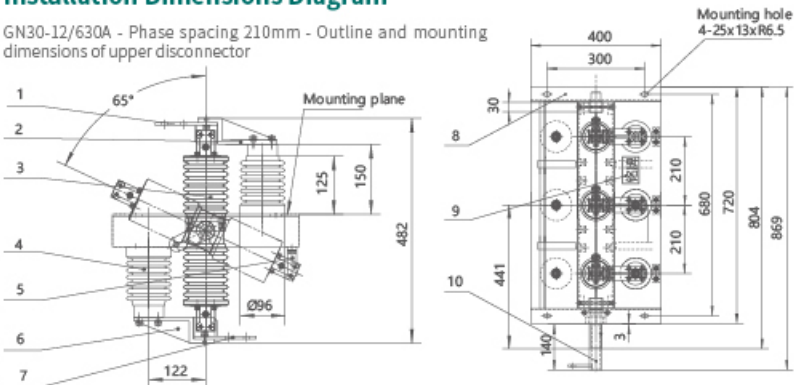
GN30-12 Indoor Rotary High Voltage Disconnect Switch is a new type of disconnecting switch with a rotary contact blade design. Its main structure consists of two sets of insulators and contacts fixed on the upper and lower planes of a three-phase common base frame. The opening and closing of the switch are achieved by rotating the contact blade.

Technical Specifications

Product Model and Specifications		GN30-12/400-12.5	GN30-12/630-20	GN30-12/1000-31.5	GN30-12/1250-31.5
Item	Parameter	GN30-12D/400-12.5	GN30-12D/630-20	GN30-12D/1000-31.5	GN30-12D/1250-31.5
Rated Voltage (kV)		12			
Rated Current (A)		400	630	1000	1250
Thermal Withstand Current (kA)		12.5	20	31.5	
Thermal Withstand Time (s)		4			
Dynamic Withstand Current (kA)		31.5	50	80	
Rated Insulation Level	Lightning Impulse Withstand Voltage (kV)	Phase to phase, phase to earth: 75, break: 85			
	1min Power Frequency Withstand Voltage (kV)	Phase to phase, phase to earth: 42, break: 48			

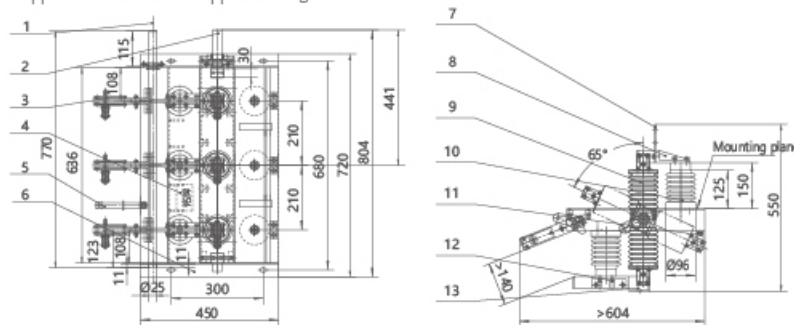
Installation Dimensions Diagram

GN30-12/630A - Phase spacing 210mm - Outline and mounting dimensions of upper disconnector



- 1.Parallel incoming contact
- 2.Parallel contact support
- 3.Rotating moving contact
- 4. Insulator
- 5.Earthling contact
- 6.Parallel contact support
- 7.Parallel outgoing contact
- 8.Frame
- 9.Nameplate
- 10.Opening/closing crank arm

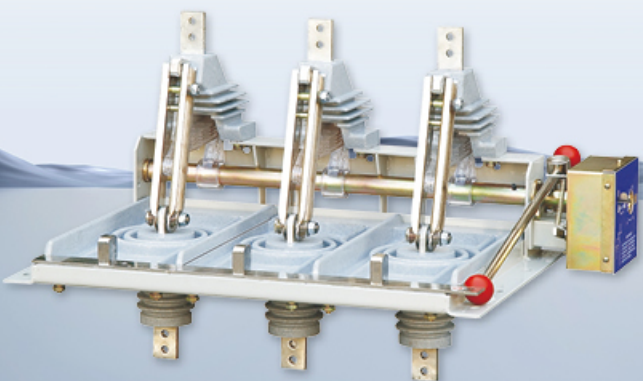
GN30-12D/630A - Phase spacing 210mm - Outline and mounting dimensions of upper disconnector with upper earthing switch



- 1.Main knife opening/closing crank arm
- 2.Earth knife opening/closing crank arm
- 3.Earthling knife
- 4.Nameplate
- 5.Earthling braid
- 6.Frame
- 7.Vertical incoming contact
- 8.Vertical contact support
- 9.Rotating moving contact
- 10. Insulator
- 11.Earthling contact
- 12.Earthling type parallel contact support
- 13.Earthling type parallel outgoing contact

Note:
1.This switch is a standard upper-isolation and upper-earthing disconnecting switch. Its line entry and exit method is: vertical entry, parallel exit.
2.If vertical entry and vertical exit are required, the user must specify this in the purchase contract.

GN38-12 indoor high-voltage isolation switch



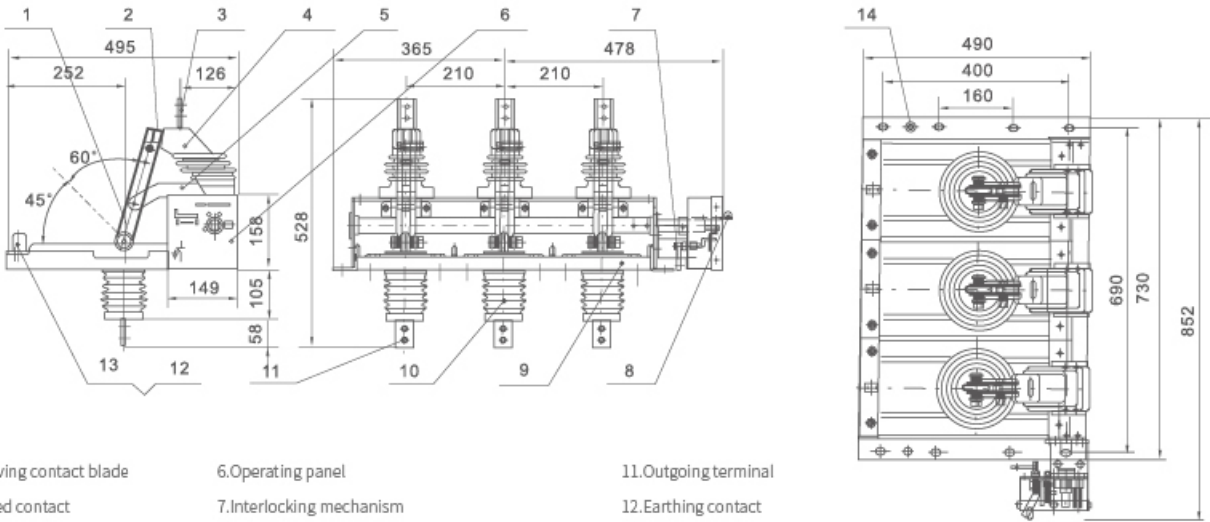
Product Overview

GN38-12 indoor high-voltage isolation switch is designed and manufactured to meet the development needs of fixed-type high-voltage switchgear and ring main units toward compact and miniaturized designs. It features a three-position structure and a fully insulated base plate, and is equipped with a coaxial locking mechanism and a comprehensive mechanical interlocking system. With its compact and small appearance, it is the optimal switch option for compact cubicle-type switchgear.

Technical Specifications

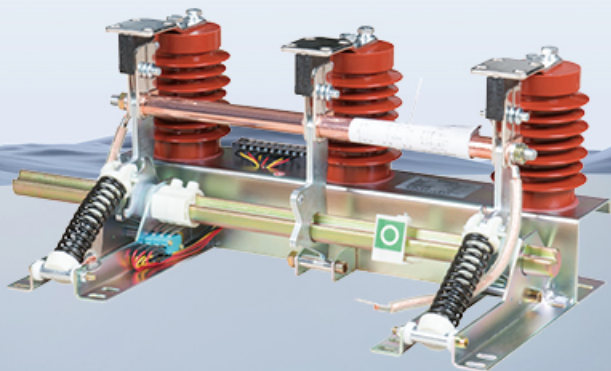
Item	Unit	Data
Rated Voltage	kV	12
Rated Frequency	Hz	50
Rated Current	A	630-1250
Rated Thermal Withstand Current (4s)	kA	25-31.5
Rated Dynamic Withstand Current	kA	63-80
Rated Insulation Level	Power Frequency Withstand Voltage	Phase to phase, phase to earth: 42, break: 48
	Lightning Impulse Withstand Voltage	

Installation Dimensions Diagram



- 1.Moving contact blade
- 2.Fixed contact
- 3.Incoming terminal
- 4. Insulating support
- 5. Insulating pull rod
- 6.Operating panel
- 7. Interlocking mechanism
- 8.Manual operating positioning mechanism
- 9.Base
- 10. Busbar through-wall insulating base plate
- 11.Outgoing terminal
- 12.Earthling contact
- 13.Earthling busbar
- 14.Earthling screw

JN15-12/31.5 Indoor high voltage grounding switch



Product Overview

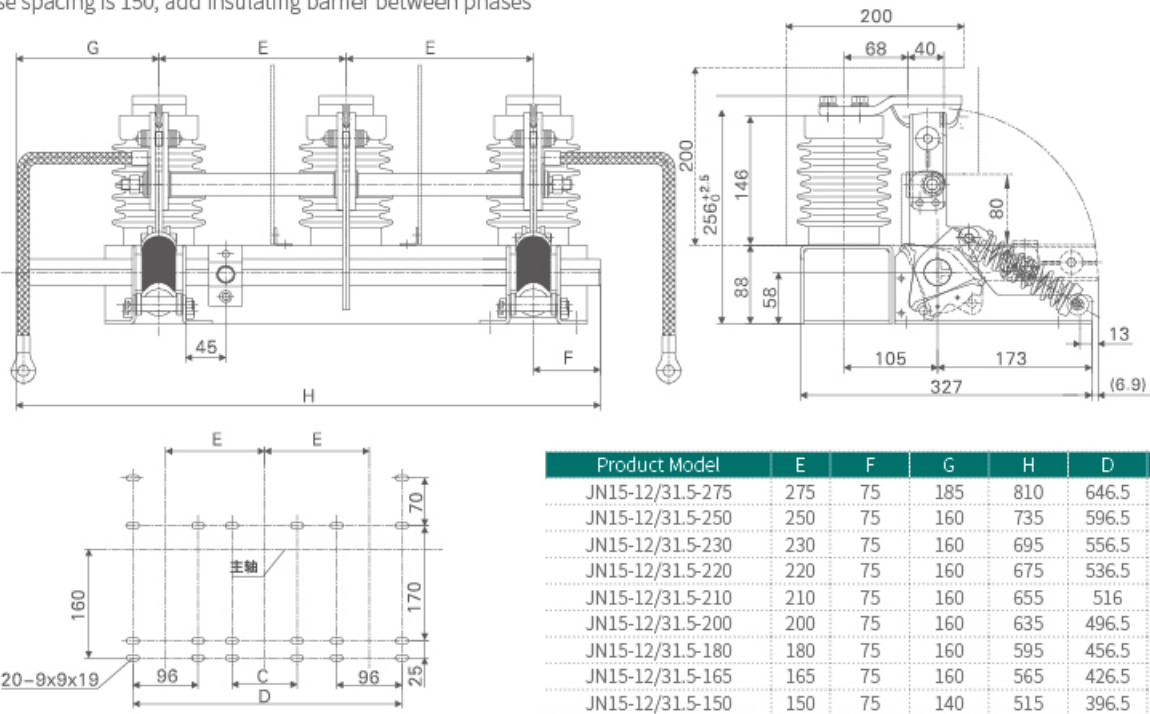
JN15-12/31.5 Indoor high voltage grounding switch is a grounding switch manufactured by our company using advanced technology. It features an assembled structural design and its performance complies with the national standard GB 1985-2014 "Alternating-current high-voltage disconnectors and earthing switches". It is suitable for indoor 3.6-12kV three-phase AC 50(60)Hz power systems. It possesses short-circuit making capability to protect other electrical equipment within the switchgear from damage. It can be used in conjunction with various types of high-voltage switchgear, serving as grounding protection during maintenance of high-voltage electrical equipment.

Technical Specifications

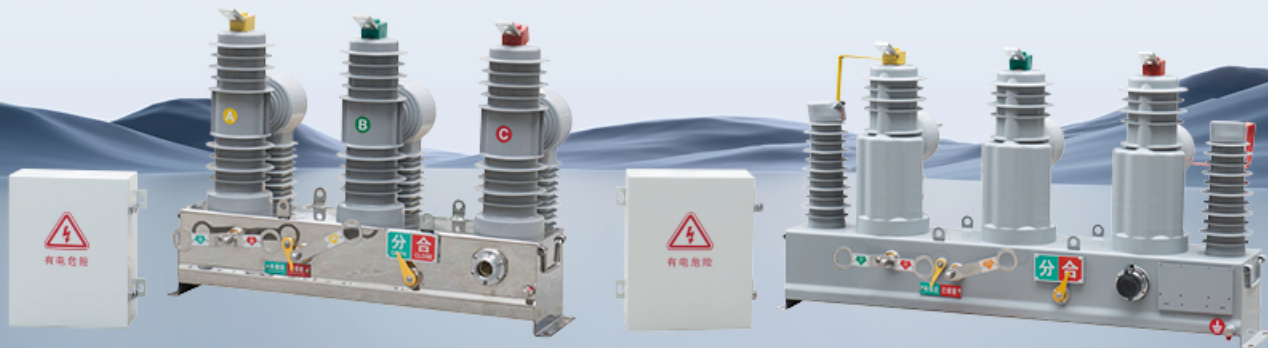
Item		Unit	Parameter	
Rated Voltage		kV	12	
Rated Short-Time Withstand Current (Thermal Withstand)		kA	31.5	
Rated Short-Circuit Duration		S	4	
Rated Short-Circuit Making Current		kA	80	
Rated Peak Withstand Current (Dynamic Withstand)		kA	80	
Rated Insulation Level	Rated Short-Time Power Frequency Withstand Voltage	kV	Phase to earth and phase to phase	42
	Rated Lightning Impulse Withstand Voltage			75
Mechanical Life		Times	3000	

Installation Dimensions Diagram

When phase spacing is 150, add insulating barrier between phases



ZW32-12 One- and two-time integrated pole-mounted vacuum circuit breaker (State Grid)



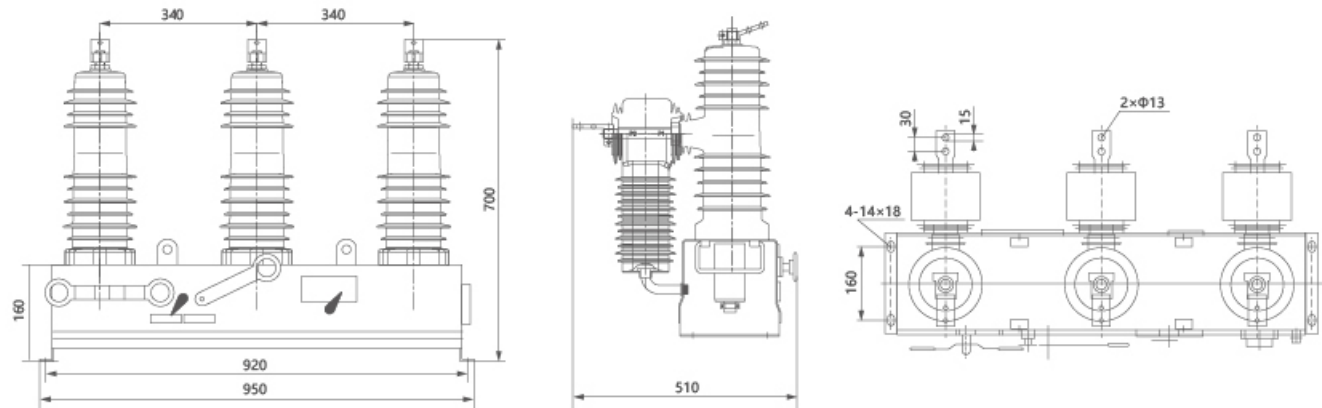
Product Overview

ZW32-12 One- and two-time integrated pole-mounted vacuum circuit breaker (State Grid) is an outdoor power distribution equipment with a rated voltage of 12kV and three-phase AC 50Hz. The product embodies an integrated design concept, with the circuit breaker body deeply integrating a set of high-precision, wide-range voltage/current sensors. The product supports distribution automation line loss management, local feeder automation, and low-current single-phase ground fault handling applications. It is an integrated primary-and-secondary outdoor prefabricated product that meets the requirements of "intelligent distribution, integrated assembly, functional modularization, and flexible interchangeability." The product is installed at section points, tie points, branch lines, and the line-side terminals of user outgoing lines on 10kV overhead lines to realize distribution automation functions.

Technical Specifications

Item		Unit	Parameter
Rated Voltage		kV	12
Rated Frequency		Hz	50
Rated Current		A	630
Rated Short-Time Withstand Current		kA	20
Rated Peak Withstand Current		kA	50
Rated Short-Circuit Duration		S	4
Rated Number of Short-Circuit Breaking Operations		次	30
Rated Cable Charging Current		A	25
Partial Discharge		PC	≤ 20
Rated Power Frequency Withstand Voltage (1min)	Phase to earth / Phase to phase	kV	42
	Break	kV	48
	Auxiliary and control circuit	kV	0.2
Rated Lightning Impulse Withstand Voltage	Phase to earth	kV	75
	Break	kV	85
Rated Operating Sequence			O-0.3s-CO-180s-CO
Mechanical Life		Times	Spring: 10000; Permanent magnet: 30000
Weight		Kg	150
Overall Dimensions		mm	950×500×700

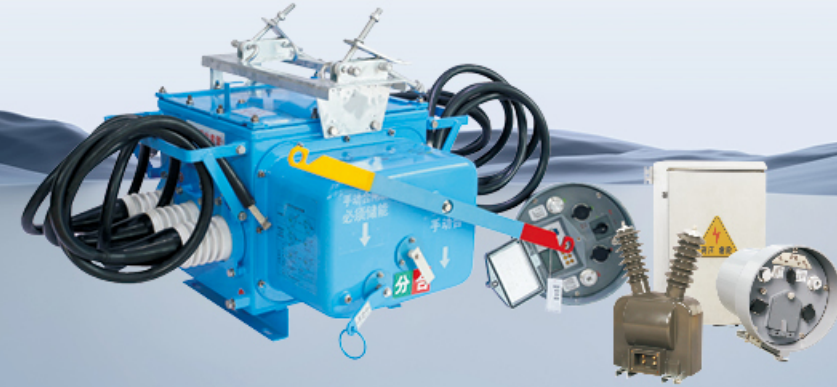
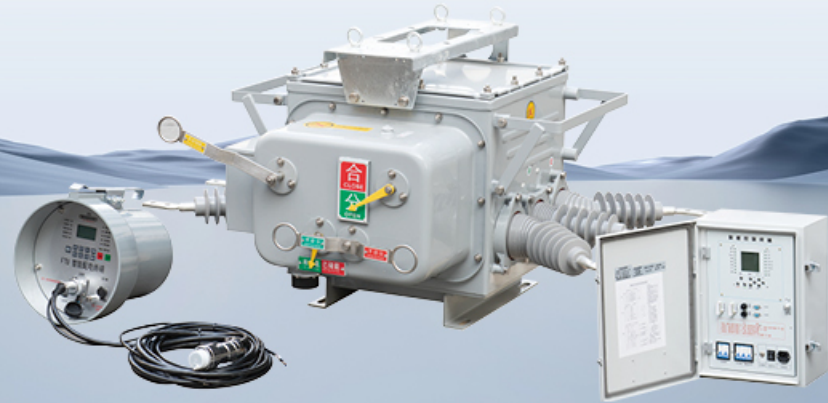
Outline and Mounting Dimensions



ZW20-12 One- and Two-time Integrated Pole-mounted Vacuum Circuit Breaker Automation Complete Set (China Southern Power Grid)



FZW28-12F Column mounted vacuum load switch



Product Overview

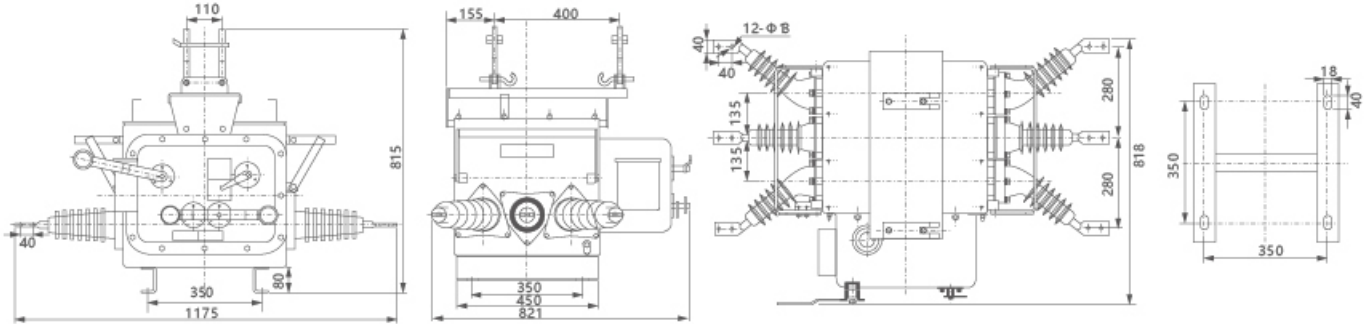
ZW20-12 One- and Two-time Integrated Pole-mounted Vacuum Circuit Breaker Automation Complete Set (China Southern Power Grid) is an outdoor power distribution equipment with a rated voltage of 12kV and three-phase AC 50Hz. The product embodies an integrated design concept, with the circuit breaker body deeply integrating a set of high-precision, wide-range voltage/current sensors. The product supports distribution automation line loss management, local feeder automation, and low-current single-phase ground fault handling applications. It is an integrated primary-and-secondary outdoor prefabricated product that meets the requirements of "intelligent distribution, integrated assembly, functional modularization, and flexible interchangeability."

The product is installed at section points, tie points, branch lines, and the line-side terminals of user outgoing lines on 10kV overhead lines to realize distribution automation functions.

Technical Specifications

Item			Unit	Parameter
Rated Voltage			kV	12
Rated Current			A	630
Rated Frequency			Hz	50
Rated Frequency	Main Circuit 1min Power Frequency Withstand Voltage	Phase to Phase, Phase to Earth	kV	42
		Break		48
	Lightning Impulse Withstand Voltage (Peak)	Phase to Phase, Phase to Earth		75
		Break		85
	Auxiliary Circuit 1min Power Frequency Withstand Voltage			
Rated Short-Circuit Breaking Current (RMS)			kV	20、25
DC Component of Rated Short-Circuit Breaking Current			%	51
DC Time Constant of Rated Short-Circuit Breaking Current			ms	45
Rated Short-Circuit Making Current (Peak)			kA	50、63
Rated Short-Time Withstand Current (RMS)			kA	20、25
Rated Peak Withstand Current			kA	50、63

Outline and Mounting Dimensions



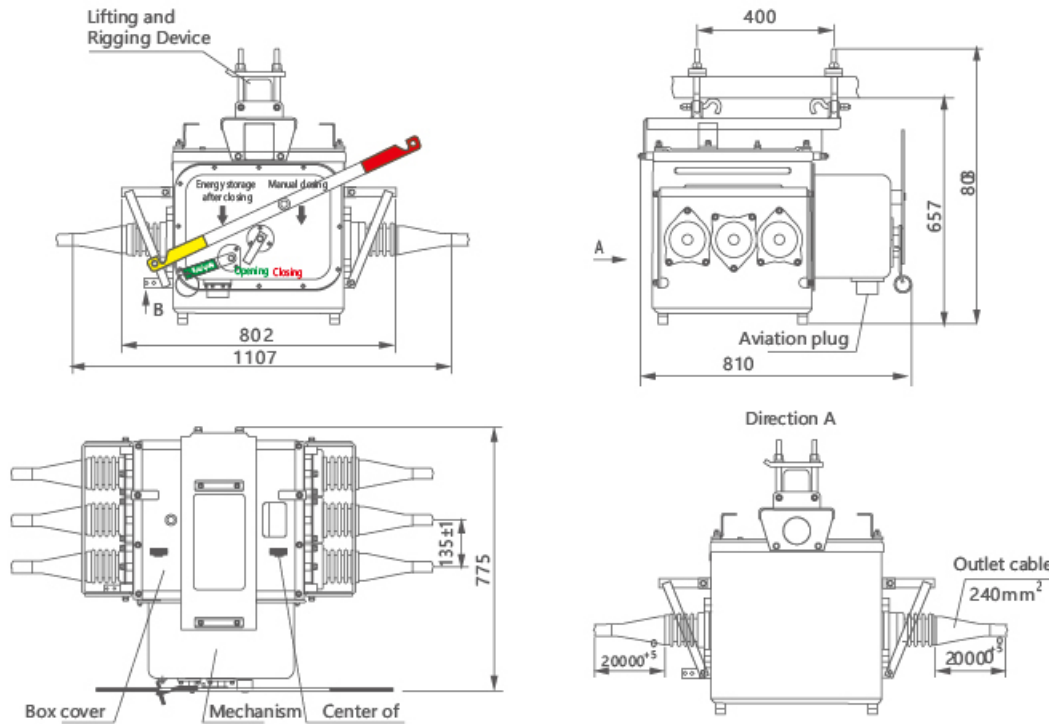
Base Installation hole size

Circuit Breaker Bottom Surface Installation Dimensions Diagram

Technical Specifications

Item	Unit	Parameter
Rated Short-Circuit Breaking Current (Circuit Breaker)	kA	20
Rated Withstand Current (Peak)	kA	50
Rated Short-Time Withstand Current	kA	20
Rated Short-Circuit Making Current (Peak)	kA	50
Closing Bounce	ms	≤ 2
Mechanical Life	Times	10000
Three-Phase Opening Non-Simultaneity	ms	≤ 2
Isolating Break Closing Overtravel	mm	6~13
Isolating Break Opening Gap	mm	25~30

Outline and Mounting Dimensions



ZW32F-12(G) Type outdoor AC high voltage boundary vacuum circuit breake



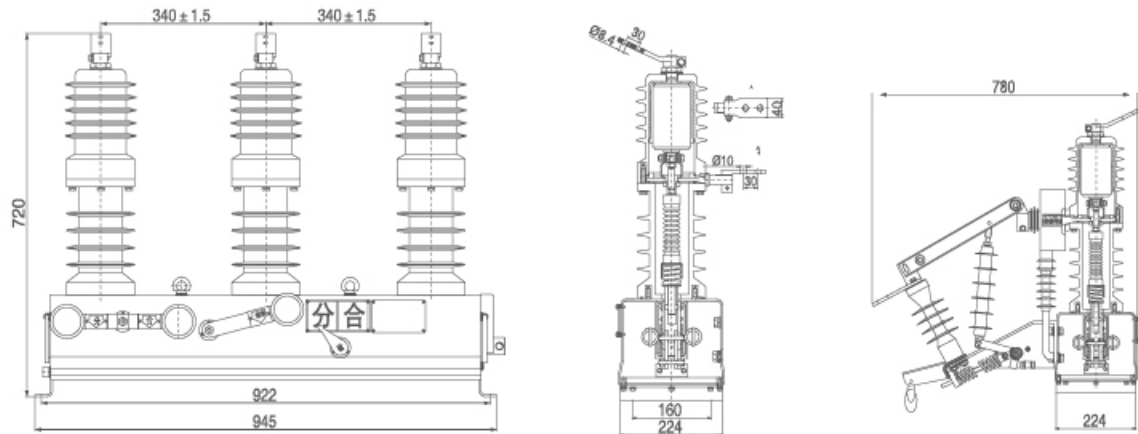
Product Overview

ZW32F-12(G) Outdoor AC High-Voltage Boundary Vacuum Circuit Breaker is a new type of product manufactured by our company. The boundary circuit breaker is a multifunctional intelligent device integrating four major switches: vacuum circuit breaker, boundary circuit breaker, and section switch. Its main configuration consists of three major components: the vacuum boundary circuit breaker body, the MGK16 controller, and an external voltage transformer (note: dual-side PTs are optional in distribution automation loop network lines). The product is widely used in 10kV urban and rural distribution overhead loop network lines as a sectional disconnecting switch and tie switch, and can serve as an automatic switching device for load allocation in loop network lines. In branch lines supplying large users, it can be used as a boundary switch (commonly known as a "watchdog"). For feeder overhead distribution networks, it serves as a boundary circuit breaker and section switch. The vacuum boundary circuit breaker features remote management mode, protection control functions, and communication functions. It can reliably detect and judge milliampere-level zero-sequence currents and phase-to-phase short-circuit fault currents within the boundary, and automatically clear single-phase grounding faults as well as phase-to-phase short-circuit faults.

Technical Specifications

Item	Unit	Parameter	
Rated Voltage	kV	12	
Rated Frequency	Hz	50	
Rated Current	A	630、1250	
Rated Short-Circuit Breaking Current	kA	16	20
Rated Short-Time Withstand Current		16	20
Rated Peak Withstand Current (Peak)		40	50
Rated Short-Circuit Duration	S	4	
Rated Short-Circuit Making Current (Peak)		50	
1min Power Frequency Withstand Voltage	kV	Phase to phase, phase to earth	42
		Break	48
Lightning Impulse Withstand Voltage		Phase to phase, phase to earth	75
		Break	85
Rated Operating Sequence		O - 0.3s - CO - 180s - CO	
Rated Current Breaking Operations	Times	10000	
Rated Short-Circuit Breaking Operations		50	

Installation Dimensions Diagram



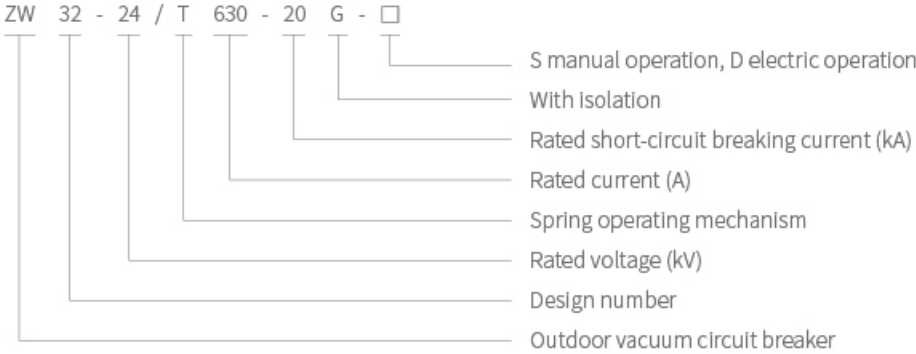
ZW32-24 Outdoor high voltage vacuum circuit breaker



Product Overview

ZW32-24 Outdoor high voltage vacuum circuit breaker (hereinafter referred to as the circuit breaker) is an outdoor power distribution equipment with a rated voltage of 24kV and three-phase AC 50Hz. It is mainly used for making and breaking load currents, overload currents, and short-circuit currents in power systems. It is suitable for protection and control applications in substations as well as in power distribution systems of industrial and mining enterprises, and for locations requiring frequent operations in rural power networks. This circuit breaker features small size, light weight, anti-condensation design, and maintenance-free operation, enabling it to adapt to harsh climatic conditions and polluted environments.

Meaning of Model Numbe



Technical Specifications

Item	Unit	Parameter
Rated Voltage	kV	24
Rated Frequency	Hz	50
Rated Current	A	630
Rated Short-Circuit Breaking Current	kA	20
Rated Peak Withstand Current (Peak)	kA	50
Rated Short-Time Withstand Current	kA	20
Rated Short-Circuit Making Current (Peak)	kA	50
Mechanical Life	Times	10000
Rated Number of Short-Circuit Breaking Operations	Times	≥ 30
Power Frequency Withstand Voltage (1min): (Wet) (Dry) Phase to phase, phase to earth / Break	kV	65/79
Lightning Impulse Withstand Voltage (Peak) Phase to phase, phase to earth / Break	kV	125/145
Auxiliary Circuit 1min Power Frequency Withstand Voltage	kV	2

ZW32-40.5 Pole mounted circuit breaker



Product Overview

ZW32-40.5 Pole-Mounted Circuit Breaker (hereinafter referred to as "the circuit breaker") is used in three-phase power systems with AC 50Hz and a rated voltage of 35kV, for making and breaking load currents, overload currents, and short-circuit currents. The circuit breaker can be equipped with a reclosing controller capable of identifying current characteristics and performing multiple automatic reclosures. It comes with a built-in PT as a power source, making it an intelligent circuit breaker with voltage and current signal output and controllability. An electronic PT provides power and enables three-stage composite protection, including overcurrent delay, inrush current delay, and short-circuit instantaneous trip.

Meaning of Model Numbe



Technical Specifications

Item	Unit	Technical Specifications
Rated Voltage	kV	40.5
Rated Frequency	Hz	50/60
Rated Current	A	630/1250
Rated Short-Time Withstand Current	kA	25
Rated Peak Withstand Current	kA	50
Rated Short-Circuit Duration	S	4
Rated Number of Short-Circuit Breaking Operations	Times	30
Rated Cable Charging Current	A	25
Rated Power Frequency Withstand Voltage (1min)	Phase to earth / Phase to phase	kV
	Break	kV
	Auxiliary and control circuit	kV
Rated Lightning Impulse Withstand Voltage	Phase to earth / Phase to phase	kV
	Break	kV
Rated Operating Sequence		O-0.3s-CO-180s-CO
Mechanical Life	Times	Spring: 10000; Permanent magnet: 30000
Weight	Kg	150
Overall Dimensions	mm	1300×600×900

ZW43-12 Outdoor high voltage vacuum circuit breaker



Product Overview

ZW43-12 Outdoor High-Voltage Vacuum Circuit Breaker is a miniaturized product of the ZW32 circuit breaker. It is an outdoor high-voltage switchgear for three-phase AC 50Hz, rated voltage 12kV, suitable for making and breaking load currents, overload currents, and short-circuit currents in urban or rural power distribution systems.

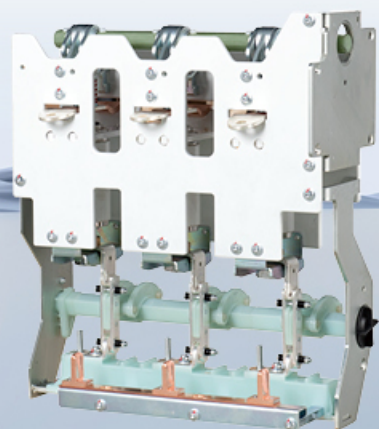
Meaning of Model Numbe



Technical Specifications

Item	Unit	ZW43-12/630-16	ZW43-12/630-20
Rated Voltage	kV	12	
Rated Current	A	630	
Rated Short-Circuit Breaking Current	kA	16	20
Rated Short-Circuit Making Current (Peak)		40	50
Rated Peak Withstand Current		40	50
Rated Short-Time Withstand Current		16	20
Rated Short-Circuit Duration	S	4	
Rated Insulation Level	Lightning Impulse Withstand Voltage (Peak)	Phase to phase, phase to earth: 75, break: 85 Phase to phase, phase to earth: 42, break: 48	
	1min Power Frequency Withstand Voltage		
Rated Operating Sequence		O - 0.3s - CO - 180s - CO (motor-operated mechanism)	
Rated Number of Short-Circuit Breaking Operations	Times	30	
Mechanical Life		10000	
Rated Operating Voltage (Opening/Closing Coil)	V	DC220,110,AC220	
Allowable Accumulated Wear Thickness of Moving and Fixed Contacts	mm	3	
Rated Current of Overcurrent Release	A	5	
Current Transformer Ratio		200/5 400/5 630/5	
Contact Gap	mm	9±1	
Contact Overtravel		2	
Average Opening Speed	m/s	1.2±0.2	
Average Closing Speed		0.6±0.2	
Opening Time	ms	15~50	
Closing Time		25~80	
Closing Bounce Time		≤ 2	
Three-Phase Opening and Closing Synchronism		≤ 2	
DC Resistance of Each Phase Circuit	μΩ	≤ 80	

YCV-12 Inflatable cabinet circuit breaker



Product Overview

YCV-12 Inflatable cabinet circuit breaker offers advantages such as easy installation, low maintenance, long service life, compact size, affordable cost, and high safety and reliability.
The product complies with the technical requirements of GB 1984-89 and GB/T 1984-2003 for AC high-voltage circuit breakers.
Main circuit: 630A – 20kA (4s), 25kA (3s); mechanical endurance: 10,000 operations.
Earthing circuit: 20kA (2s); mechanical endurance: 3,000 operations.

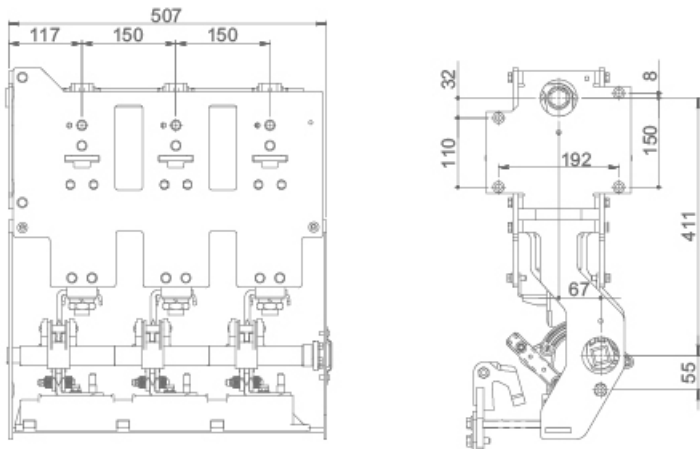
Service Environmental Conditions

Altitude not exceeding 3000m, seismic intensity not exceeding degree 8;
Ambient temperature of product from -40°C to +50°C , relative humidity daily average not greater than 90%, monthly average not greater than 90%;
Not suitable for use in installation sites with frequent severe vibration, water vapor, gases, chemical corrosive deposits, salt spray, dust and dirt that significantly affect mechanism performance, as well as sites with fire and explosion hazards.

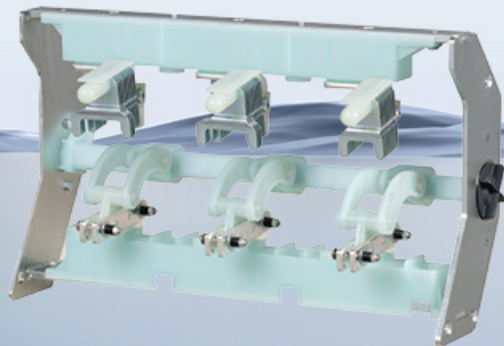
Technical Specifications

Item	Unit	Parameter
Rated Voltage	kV	12
Rated Frequency	Hz	50
Rated Current	A	630
Rated Short-Time Withstand Current	kA	20/25
Rated Peak Withstand Current	kA	50
Rated Short-Circuit Duration	s	4
Rated Short-Circuit Making Current	kA	50
Theoretical Operation	Times	10000
Main Circuit Resistance	μΩ	≤ 60
1min Power Frequency Withstand Voltage	kV	38 (in air)

Installation Dimensions Diagram



YCF-12 Inflatable cabinet load switch



Product Overview

YCF-12 Inflatable cabinet load switch complies with the relevant requirements of GB 3804-2004 "High-voltage alternating-current switches for rated voltages above 3.6 kV and less than 40.5 kV" and GB 16926-1997 "Alternating-current high-voltage load switch – fuse combination apparatus".
Main circuit: 630A – 20kA (4s), 25kA (3s); mechanical endurance: 5,000 operations.

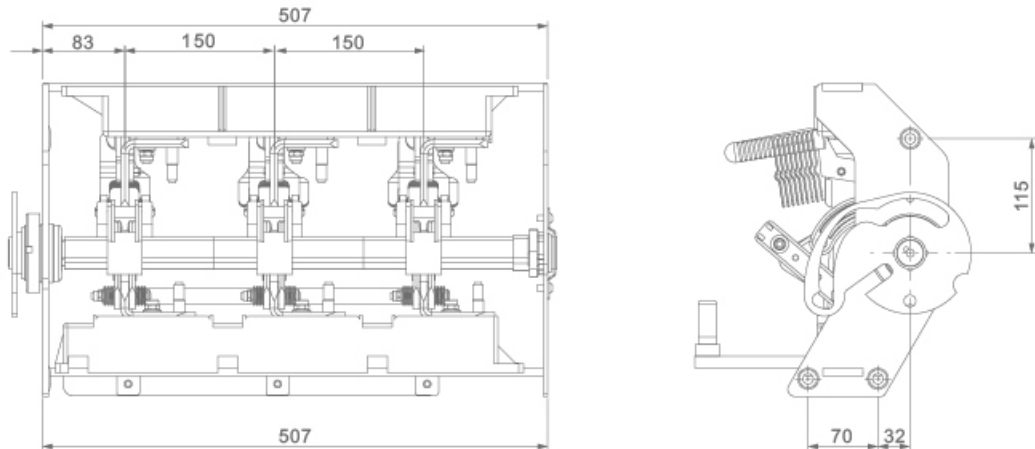
Service Environmental Conditions

Altitude not exceeding 3000m, seismic intensity not exceeding degree 8;
Ambient temperature of product from -40°C to +50°C , relative humidity daily average not greater than 90%, monthly average not greater than 90%;
Not suitable for use in installation sites with frequent severe vibration, water vapor, gases, chemical corrosive deposits, salt spray, dust and dirt that significantly affect mechanism performance, as well as sites with fire and explosion hazards.

Technical Specifications

Item	Unit	Parameter
Rated Voltage	kV	12
Rated Frequency	Hz	50
Rated Current	A	630
Rated Short-Time Withstand Current	kA	20/25
Rated Peak Withstand Current	kA	50
Rated Short-Circuit Duration	S	4
Rated Short-Circuit Making Current	kA	50
Mechanical Life	Times	5000

Installation Dimensions Diagram



VYC-12 Type Indoor high-voltage ac vacuum circuit breaker (Export model with aviation connector)



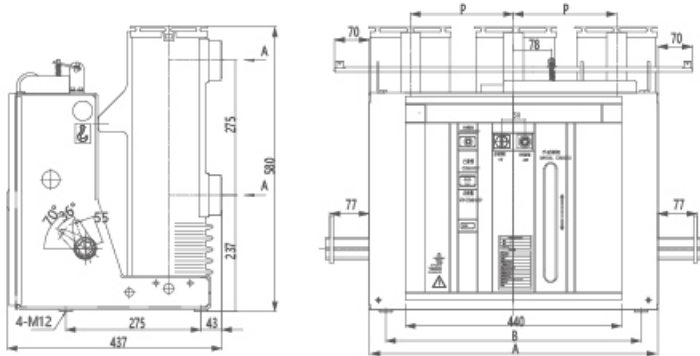
Product Overview

VYC-12 Type Indoor high-voltage ac vacuum circuit breaker (Export model with aviation connector) is widely used in indoor armored air-insulated switchgear. It complies with the requirements of standards such as GB/T 1984, DL/T 402, GB 311.1, GB 3309, GB/T 11022, GB/T 16927.1, and IEC 62271-100. Under normal operating conditions, as long as the circuit breaker operates within its technical specifications, it can operate safely and reliably in power grids of the corresponding voltage level.

Technical Specifications

Item	Unit	Parameter					
Rated Voltage	kV	12					
Rated Frequency	Hz	50					
Rated Power Frequency Withstand Voltage (1min)	kV	42					
Rated Lightning Impulse Withstand Voltage (Peak)	kV	75					
Rated Current	A	630	630	630	1250	1250	
		1250	1250	1250	1600	1600	
		1600	1600	1600	2000	2000	
				2000	2500	2500	
					2500	3150	3150
Rated Short-Circuit Breaking Current	kA	20	25	31.5	40	50	
Rated Short-Time Withstand Current		20	25	31.5	40	50	
Rated Peak Withstand Current		50	63	80	100	125	
Rated Short-Circuit Making Current (Peak)		50	63	80	100	125	
Rated Dynamic Withstand Current		50	63	80	100	125	
Rated Single / Back-to-Back Capacitor Bank Breaking Current	A	630/400					
Rated Short-Circuit Current Duration	s	4					
Rated Number of Short-Circuit Breaking Operations	Times	50 (30 for 40kA and above)					
Breaking Time / Arcing Time	ms	≤ 100/ ≤ 15					
Rated Operating Sequence for Auto-Reclosing		O - 0.3s - CO - 180s - CO					
Rated Operating Voltage	V	AC 110/220 DC 110/220					
Percentage DC Component of Rated Short-Circuit Breaking Current	%	≤ 40					
Mechanical Life	Times	10000					

Installation Dimensions Diagram



VYC-12 Type indoor high-voltage ac vacuum circuit breaker (Export Type)



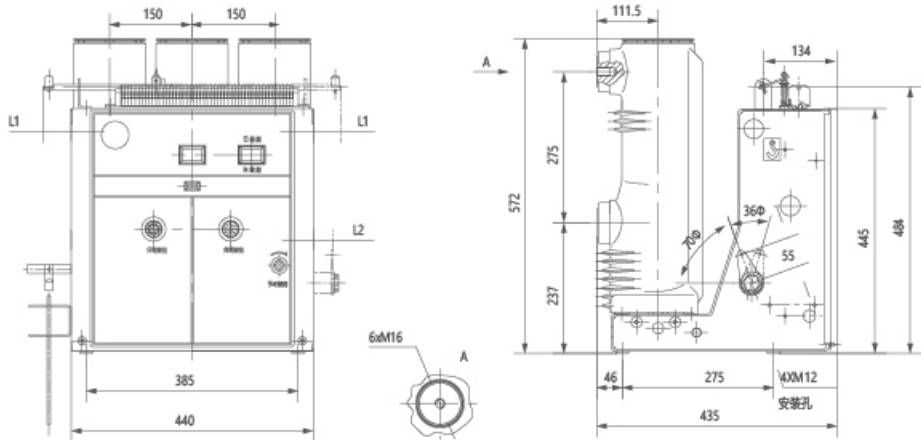
Product Overview

VYC-12 Type indoor high-voltage ac vacuum circuit breaker (Export Type) is an indoor switchgear device used in 12kV power systems, serving as a protection and control unit for power grid equipment and power drive equipment in industrial and mining enterprises. Due to the special advantages of vacuum circuit breakers, it is particularly suitable for applications requiring frequent operations at rated current or repeated interruption of short-circuit currents. The circuit breaker adopts an integrated design of the operating mechanism and the breaker body. It can be used as a fixed-mounted unit or equipped with a dedicated racking mechanism to form a withdrawable unit.

Technical Specifications

Item	Unit	Parameter					
Rated Voltage	kV	12					
Rated Short-Time Power Frequency Withstand Voltage (1min)		42					
Rated Lightning Impulse Withstand Voltage (Peak)		75					
Rated Frequency	Hz	50					
Rated Current	A	630	1250	1600	2000	2500	3150
Rated Short-Circuit Breaking Current	kA	20/25	31.5	40	50	63	80
Rated Short-Time Withstand Current		20/25	31.5	40	50	63	80
Rated Short-Circuit Duration	s	4					
Rated Peak Withstand Current	kA	50/63	80	100	125	160	2000
Rated Short-Circuit Making Current		50/63	80	100	125	160	2000
Auxiliary Circuit Power Frequency Withstand Voltage (1min)	V	2000					
Rated Single / Back-to-Back Capacitor Bank Breaking Current	A	630/400 (800/400 for 40kA)					
Rated Capacitor Bank Making Inrush Current	kV	12.5 (frequency not greater than 100Hz)					
Opening Time (Rated Voltage)	ms	≤ 50					
Closing Time (Rated Voltage)		≤ 60					
Mechanical Life	Times	20000					
Rated Current Breaking Operations (Electrical Life)		20000					
Rated Short-Circuit Breaking Operations		50(40kA ≤ 30)					

Installation Dimensions Diagram



VYC(VS1)-12 Type indoor side-mounted vacuum circuit breaker (Export Type)



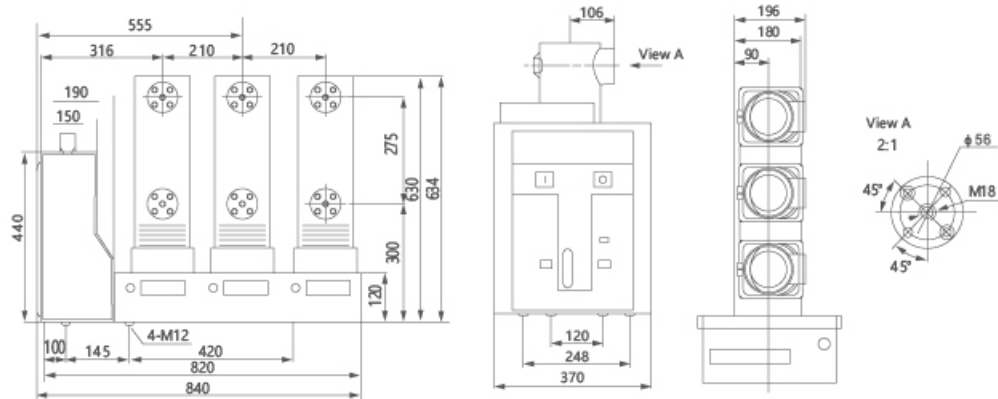
Product Overview

VYC(VS1)-12 Type indoor side-mounted vacuum circuit breaker (Export Type) is an indoor high-voltage switchgear suitable for use as a protection and control device in three-phase power systems with a rated voltage of 12kV and a frequency of 50Hz. Owing to the special advantages of vacuum circuit breakers, it is particularly suitable for applications requiring frequent operations at rated current or repeated interruption of short-circuit currents. The VYC(VS1)-12 Indoor Side-Mounted Vacuum Circuit Breaker (export type) adopts a fixed-mounted installation method and is primarily used in fixed-type switchgear. The circuit breaker can be used either as a stand-alone unit or in loop network power supply systems, compact substations, or various non-standard power supply systems.

Technical Specifications

Item	Unit	Parameter		
Rated Voltage	kV	12		
Rated Maximum Operating Voltage	kV	630	630	630
Rated Current	A	1250	1250	1250
Rated Short-Circuit Breaking Current	kA	20	25	31.5
Rated Short-Circuit Making Current	kA	50	63	80
Rated Peak Withstand Current	kA	50	63	80
4s Rated Short-Circuit Withstand Current	kA	20	25	31.5
Rated Power Frequency Withstand Voltage (Before and After Rated Breaking)	kV	42 (Break 48)		
Insulation Level Impulse Withstand Voltage (Before and After Rated Breaking)		75 (Break 84)		
Rated Operating Sequence	Times	O - 0.3s - CO - 180s - CO		
Mechanical Life	Times	1000		
Rated Number of Short-Circuit Breaking Operations	V	50		
Rated Closing Voltage of Operating Mechanism (DC)	V	AC/DC 110、 220		
Rated Opening Voltage of Operating Mechanism (DC)	mm	AC/DC 110、 220		
Contact Gap	mm	11±1		
Overtravel (Contact Spring Compression Length)	ms	3.5±0.5		
Three-Phase Opening and Closing Bounce Time	ms	≤ 2		
Contact Closing Bounce Time	m/s	≤ 2		

Installation Dimensions Diagram



VYC-24 Type indoor high-voltage vacuum circuit breaker (Export Type)



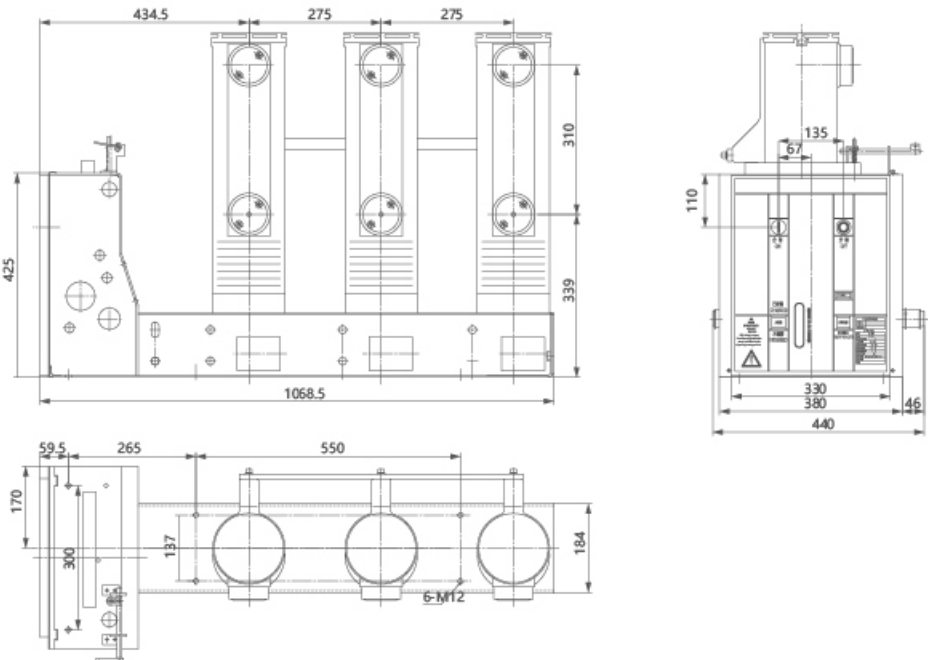
Product Overview

VYC-24 Type indoor high-voltage vacuum circuit breaker (Export Type) employs a spring-operated mechanism as its energy storage element, available in both manual and electric charging versions. Its performance complies with the relevant provisions of GB/T 1984-2014 "Alternating-current high-voltage circuit breakers", JB/T 3855-96 "General technical requirements for 24kV indoor high-voltage vacuum circuit breakers", the international IEC 56 standard, and the technical specifications of this product.

Technical Specifications

Item	Unit	Parameter	
Contact gap	mm	13±1	
Overtravel		3±0.5	
Phase-to-phase center distance		210±1	
Contact closing bouncing time	ms	≤ 2	
Three-phase opening and closing asynchronism		≤ 2	
Opening time		≤ 50	
Closing time	m/s	≤ 100	
Average opening speed (over the first 6mm after contact separation)		0.9~1.3	
Average closing speed (over the last 6mm before contact closure)		0.4~0.8	
Closing contact contact force	N	25kV	31.5kV
		2200±200	3200±200

Installation Dimensions Diagram



VYC(VS1)-40.5 Side-mounted indoor high-voltage vacuum circuit breaker (Export Type)



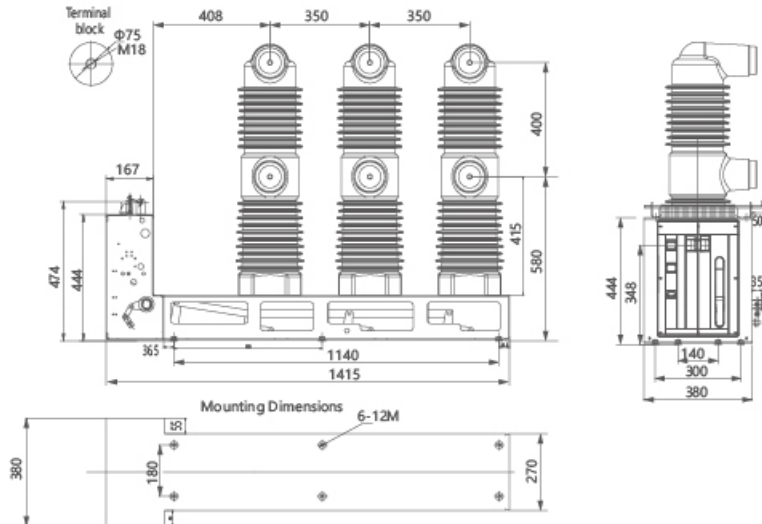
Product Overview

VYC(VS1)-40.5 Side-mounted indoor high-voltage vacuum circuit breaker (Export Type) is suitable for use in 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 currents, overload currents, and fault currents, and is also suitable for frequent operation applications. This circuit breaker adopts a composite insulation structure. The three-phase arc extinguishing chambers and associated live parts are mutually isolated by three independent epoxy resin insulating covers. With the composite insulation structure, the circuit breaker meets the air clearance and creepage distance requirements under normal operating conditions while effectively reducing the overall size of the breaker. The main circuit vacuum interrupter and the moving and fixed conductive connections are installed inside the insulating cylinder. All primary circuit electrical connections are fixed connections, offering high reliability.

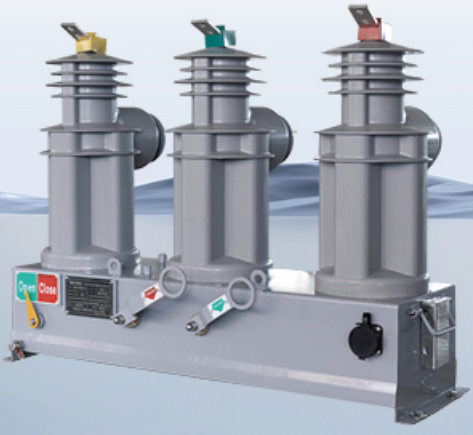
Technical Specifications

Item	Unit	Parameter
Rated Voltage	kV	40.5
Rated Frequency	Hz	56/60
Rated Current	A	1250/1600/2000/2500/3150
Rated Short-Circuit Breaking Current	kA	25 31.5
Rated Peak Withstand Current	kA	63 80
Rated Short-Time Withstand Current (4s)	kA	25 31.5
Rated Short-Circuit Making Current (Peak)	kA	63 80
Rated Number of Short-Circuit Breaking Operations	Times	20
Mechanical Life	Times	10000
Rated Operating Voltage	V	AC/DC220
Rated Insulation Level	Power Frequency Withstand Voltage (1 minute)	kV 95
	Lightning Impulse Withstand Voltage (Peak)	kV 185
Rated Operating Sequence		O-0.3S-CO-180S-CO
Auxiliary Circuit Power Frequency Withstand Voltage (1 minute)	kV	2

Installation Dimensions Diagram



ZW32-11 Export-type automatic recloser



Product Overview

ZW32-11 Export-Type Automatic Recloser is an outdoor power distribution equipment with a rated voltage of 11kV and three-phase AC 50Hz. It is mainly used for making and breaking load currents, overload currents, and short-circuit currents in electrical power systems. It is suitable for protection and control applications in substations as well as in power distribution systems of industrial and mining enterprises, and for locations requiring frequent operations in rural power networks. It can also serve as a section switch in power grids. When equipped with a controller, it enables distribution automation.

Reference Standards

GB1984	"Alternating-Current High-Voltage Vacuum Circuit Breaker"
GB11022	"General Technical Specifications for High-Voltage Switchgear"
GB311.1	"Insulation Coordination for High-Voltage Power Transmission and Distribution Equipment"
DL/T593	"Common Ordering Technical Conditions for High-Voltage Switchgear"
DL/T402	"Ordering Technical Conditions for Alternating-Current High-Voltage Circuit Breakers"
GB2706	"Dynamic and Thermal Stability Test Methods for Alternating-Current High-Voltage Apparatus"
GB3309	"Mechanical Tests of High-Voltage Switchgear at Ambient Temperature"
DL403	"Ordering Technical Conditions for 10 ~ 35kV Indoor High-Voltage Vacuum Circuit Breakers"

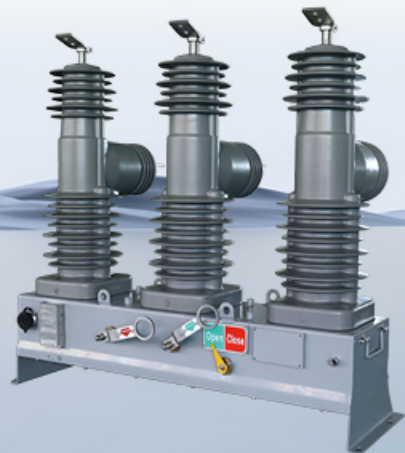
Service Environmental Conditions

- a. Altitude not exceeding 2000m;
- b. Ambient air temperature: -45°C ~ +47.5°C ; Daily temperature variation: 25°C ;
- c. Wind speed not greater than 35m/s;
- d. Places free from flammable, explosive, chemically corrosive hazards and severe vibration.

Technical Specifications

Item	Unit	Parameter
Rated Voltage	kV	11
Rated Frequency	Hz	50
Rated Current	A	630, 1250
Rated Short-Circuit Breaking Current	kA	16, 20, 25, 31.5
Rated Peak Withstand Current (Peak)	kA	50
Rated Short-Time Withstand Current	kA	16, 20, 25, 31.5
Rated Short-Circuit Making Current (Peak)	kA	50
Mechanical Life	Times	10000
Rated Number of Short-Circuit Breaking Operations	Times	30
Rated Operating Sequence		O - 0.3s - CO - 180s - CO
Power Frequency Withstand Voltage (1min): (Wet) (Dry) Phase to phase, phase to earth / Break	kV	34/42/48
Lightning Impulse Withstand Voltage (Peak) Phase to phase, phase to earth / Break	kV	75/85
Auxiliary Circuit 1min Power Frequency Withstand Voltage	kV	2

ZW32-22 Export-type automatic recloser



Product Overview

ZW32-22 Export-Type Automatic Recloser is an outdoor power distribution equipment with a rated voltage of 22kV and three-phase AC 50Hz. It is mainly used in distribution networks for making and breaking load currents, overload currents, and short-circuit currents in power systems. It is suitable for protection and control applications in substations as well as in power distribution systems of industrial and mining enterprises, and is especially applicable to rural power networks and locations requiring frequent operations.

Reference Standards

GB1984-2003	"Alternating-Current High-Voltage Circuit Breakers"
GB/T11022-1999	"Common Technical Requirements for High-Voltage Switchgear and Controlgear Standards"
GB311.1-1997	"Insulation Coordination for High-Voltage Power Transmission and Distribution Equipment: High-Voltage Test Techniques"
GB3309-1989	"Mechanical Tests of High-Voltage Switchgear at Ambient Temperature"
DL403-2000	"Ordering Technical Conditions for 12~40.5kV High-Voltage Vacuum Circuit Breakers"
DL/T593	"Common Ordering Technical Conditions for High-Voltage Switchgear"
DL/T402	"Ordering Technical Conditions for Alternating-Current High-Voltage Circuit Breakers"
GB2706	"Dynamic and Thermal Stability Test Conditions for Alternating-Current High-Voltage Apparatus"

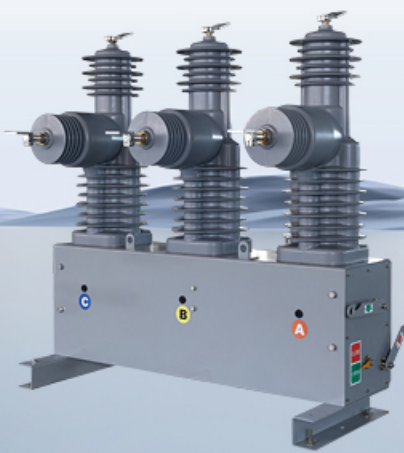
Service Environmental Conditions

- a. Altitude: 1000m;
- b. Ambient air temperature: -45°C ~ +65°C ; Daily temperature variation: 25°C ;
- c. Wind speed not greater than 35m/s;
- d. Seismic intensity not exceeding degree 8;
- e. Pollution class: Class IV;
- f. Installation site: Places free from flammable, explosive hazards and chemical corrosion.

Technical Specifications

Item	Unit	Parameter
Rated Voltage	kV	22
Rated Frequency	Hz	50
Rated Current	A	630/1250/1600
Rated Short-Circuit Breaking Current	kA	20/25/31.5
Rated Peak Withstand Current (Peak)	kA	50/63/80
Rated Short-Time Withstand Current / Duration	kA/s	25/4
Rated Short-Circuit Making Current (Peak)	kA	50/63/80
Rated Operating Sequence		0.0.3s-CO-180s-Co
Mechanical Life	Times	10000
Rated Current Breaking Operations	Times	10000
Rated Number of Short-Circuit Breaking Operations	Times	20
1min Power Frequency Withstand Voltage: (Wet) Phase to phase, phase to earth / break, (Dry) Phase to phase, phase to earth / break	kV	50/60, 60/65
Lightning Impulse Withstand Voltage (Peak) Phase to phase, phase to earth / break	kV	95/125
Auxiliary Circuit 1min Power Frequency Withstand Voltage	V	2000
Weight	kg	115

ZW32-33 Export-type automatic recloser



Product Overview

ZW32-33 Export-Type Automatic Recloser is used in three-phase power systems with AC 50Hz and a rated voltage of 33kV, for making and breaking load currents, overload currents, and short-circuit currents. The recloser can be equipped with a reclosing controller capable of identifying current characteristics and performing multiple automatic reclosures. It comes with a built-in PT as a power source, making it an intelligent circuit breaker with voltage and current signal output and controllability. An electronic PT provides power and enables three-stage composite protection, including overcurrent delay, inrush current delay, and short-circuit instantaneous trip.

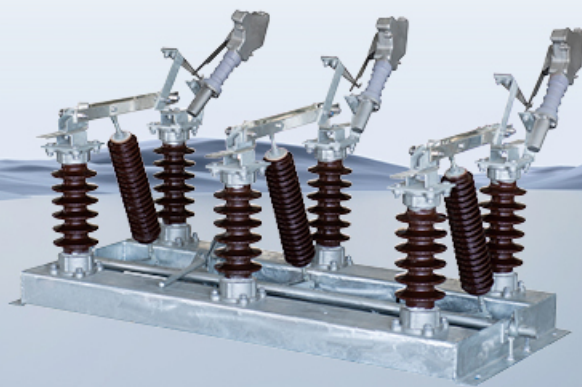
Functional Features

The circuit breaker can be equipped with a spring operating mechanism and has basic functions such as making and breaking load current, overload current, and short-circuit current. The circuit breaker can be equipped with an arrester, which can be installed on either the incoming or outgoing side according to user requirements. The circuit breaker can be equipped with an inrush current controller to provide inrush current blocking and overcurrent fast tripping functions. The circuit breaker can also be equipped with 2~3 measuring or metering current transformers. It can be combined with a reclosing controller to form a recloser-type intelligent circuit breaker. The basic type, when used with a reclosing controller, is suitable for applications where a power source is readily available. The PT type, when used with a reclosing controller, is suitable for applications without a power source. The intelligent circuit breaker is suitable for radial power supply and loop network power supply systems, helping the system clear temporary faults and automatically restore power supply, as well as isolate permanent faults to achieve distribution network automation. The circuit breaker is capable of 1~3 reclosing operations, and the recloser parameters can be adjusted. The intelligent circuit breaker features three-stage composite protection functions: inrush current control, overcurrent protection, and short-circuit quick tripping, with continuously adjustable parameters. The intelligent circuit breaker includes a small current grounding protection function with continuously adjustable parameters. The intelligent circuit breaker can be controlled remotely via a wired connection or wirelessly from the ground using a remote control. It can be equipped with a voltage transformer, which draws power from the high-voltage side of the line and can provide 220V, 110V, or 100V voltage to the device itself or other control equipment as needed. The circuit breaker (small hydropower type) can be used to monitor line voltage. In the event of overvoltage or undervoltage, the controller automatically opens the circuit breaker. It is widely used at the interconnection points between small hydropower branches and the main power grid, enabling network monitoring and automatic fault isolation. The circuit breaker (metering type) can output voltage and current signals with an accuracy of 0.2 class, making it an ideal choice for rural substations, off-site scatter switches, and simple metering switches. It can be equipped with an electronic PT, which draws power from the CT to charge the battery. In the event of a power loss, it allows multiple energy storage and open/close operations and can provide operating voltage to external equipment. It features three-stage composite protection functions: inrush current control, overcurrent protection, and short-circuit quick tripping. Protection parameters can be continuously adjusted by the user. It can be controlled remotely via wired connection or wirelessly from the ground using a remote control.

Technical Specifications

Item	Unit	Parameter
Rated Voltage	kV	33
Rated Current	A	630/1250/1600
Rated Frequency	Hz	50 or 60
Power Frequency Withstand Voltage 1min (Wet) (Dry)	kV	80/95
Lightning Impulse Withstand Current (Peak)	kV	185
Rated Short-Circuit Breaking Current	kA	25
Rated Short-Circuit Making Current (Peak)	kA	80
Rated Peak Withstand Current	kA	80
4s Short-Time Withstand Current	kA	31.5
Rated Operating Cycle		0 - 0.1s - CO - 3s - 0 - 6s - CO - 60s Recovery
Rated Number of Short-Circuit Breaking Operations	Times	30
Mechanical Life	Times	20000
Intelligent Mechanism Control Voltage	V	DC220
Auxiliary Circuit 1min Power Frequency Withstand Voltage	kV	2

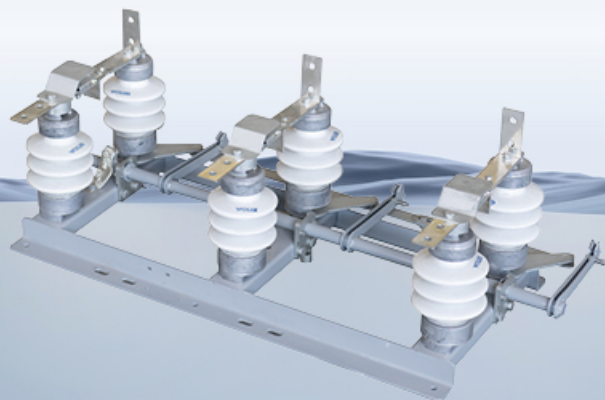
YCGWF-40.5kV Outdoor High-Voltage Disconnecting Switch (Export Type)



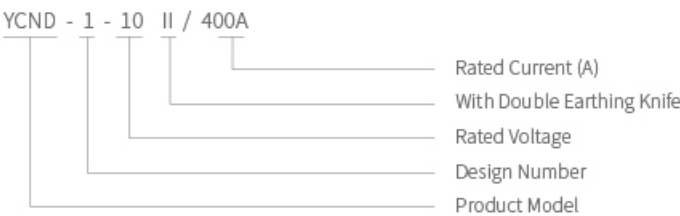
Meaning of Model Number



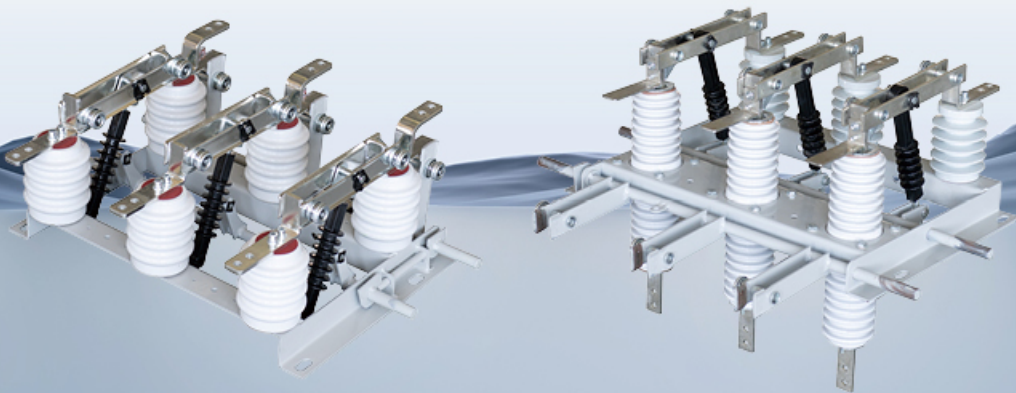
YCND-1-10 II /400A Load Disconnect Switch (Export Type)



Meaning of Model Number



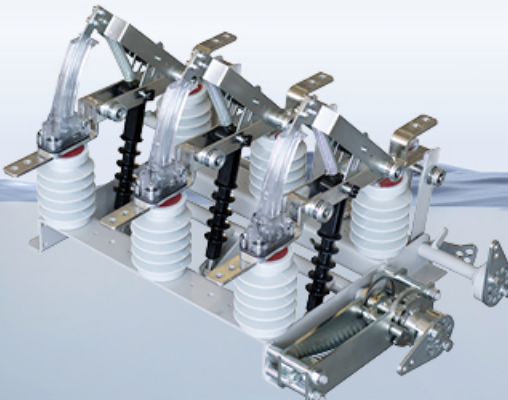
YC3-10CD/630A、YC3-10D/630A Indoor high voltage disconnecter (Export Type)



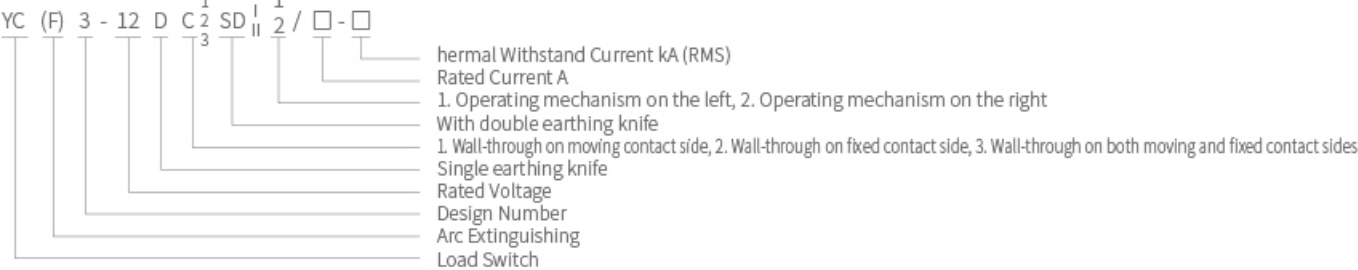
Meaning of Model Number



YC(F)3-12D Load switch (Export Type)



Meaning of Model Number



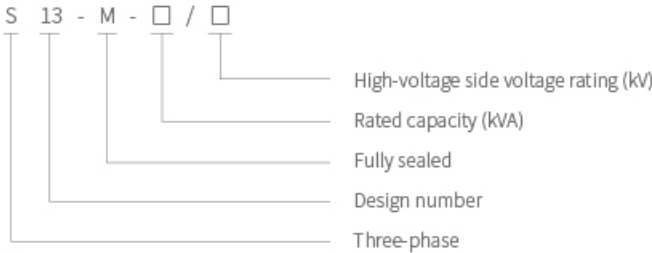
S13-M Fully sealed oil immersed power transformer



Product Overview

S13-M Fully Sealed Oil-Immersed Power Transformer can be widely used in high-rise buildings, commercial centers, subways, airports, stations, industrial and mining enterprises, drilling rigs, and oil extraction platforms. It is particularly suitable for locations with high fire protection requirements such as flammable or explosive environments, as well as areas with harsh operating conditions. It can also be used for power and lighting purposes in residential areas, commercial streets, industrial and mining enterprises, and rural areas.

Meaning of Model Numbe



Operating Conditions

Installation altitude: Not exceeding 1000m above sea level;
Ambient temperature: -40°C ~ +40°C

Technical Specifications

Rated capacity (kVA)	Voltage combination			Connection symbol	Losses (W)		No-load current (%)	Impedance (%)	Weight (kg)	
	High voltage (kV)	Tapping range (%)	Low voltage (kV)		No-load losses (W)	Load losses (W)			Oil weight	Total weight
30	6 6.3 10 10.5 11	±2×2.5% or ±5%	0.4	Dyn11 Yyn0	80	630/600	2.1	4	32	320
50					100	910/870	2.0		89	370
63					110	1090/1040	1.9		95	420
80					130	1310/1250	1.8		120	490
100					150	1580/1500	1.6		125	600
125					170	1890/1800	1.5		135	690
160					200	2310/2200	1.4		155	815
200					240	2730/2600	1.3		168	920
250					290	3200/3050	1.2	4.5	200	1020
315					340	3830/3650	1.1		230	1160
400					410	4520/4300	1.0		235	1385
500					480	5410/5150	1.0		260	1670
630					570	6200	0.9		310	1920
800					700	7500	0.8		465	2330
1000					830	10300	0.7		510	2680
1250					970	12000	0.6		625	2995
1600					1170	14500	0.6		640	3610

S11/S13-35kV Series oil-immersed power transformers



Product Overview

The S11/S13-35kV Series Oil-Immersed Power Transformers feature a new insulation structure in the active part, which improves short-circuit withstand capability. The core is made of high-quality cold-rolled silicon steel sheets. The high-voltage windings are manufactured using high-quality oxygen-free copper wire and adopt a multi-layer cylindrical structure. All fastening components are treated with special anti-loosening measures. The products offer high efficiency and low losses, resulting in significant savings in power consumption and operating costs, with notable social benefits. They are high-tech products promoted by the state.

Performance Technical Specifications

Product Standard: GB/T 1094-2013, GB6450-2015
Rated High Voltage: 35, 36.5, 38 kV
Rated Low Voltage: 0.4 kV
Connection Symbol: Dyn11 or Yyn0

High Voltage Tapping Range: ±5% or ±2×2.5%
Insulation Level: LI75AC35 / LI10AC5
Frequency: 50 Hz

35kV Class S11, S13 Series Distribution Transformers Technical Specifications

Rated capacity	Voltage combination		Connection mode	Losses (W)		No-load current (%)	Impedance voltage (%)	Weight (kg)			Overall dimensions (mm)	Gauge length / width (longitudinal / transverse)
	High voltage (kV)	Low voltage (kV)		No-load	Load (70°C)			Core and coil weight	Oil weight	Total weight		
30	35 36.5 38 Tapping range ±5%	0.4	Yyn0	0.165	0.90	2	6.5	145	205	530	1010×1020×1425	550/550
50				0.21	1.25	2		210	195	585	1010×1020×1425	
80				0.28	1.80	1.8		285	225	735	1060×1125×1560	
100				0.31	2.03	1.8		340	255	830	1090×1150×1600	
125				0.34	2.39	1.7		395	270	950	1120×1150×1625	660/660
160				0.37	2.85	1.5		475	285	1050	1130×1280×1680	
200				0.43	3.30	1.5		560	310	1190	1170×1300×1710	
250				0.52	3.96	1.4		650	350	1355	1250×1370×1735	
315				0.61	4.77	1.4		760	390	1565	1260×1730×1780	820/820
400				0.75	5.76	1.3		925	490	1875	1810×1250×1865	
500				0.87	6.93	1.3		1085	550	2135	1850×1360×1920	
630				1.05	8.30	1.1		1285	615	2505	1900×1380×1990	
800				1.25	9.90	1.0		1530	720	2945	2100×1400×2075	1070/1070
1000				1.44	12.20	0.7		1845	815	3500	2220×1430×2245	
1250				1.76	14.70	0.6		1930	935	3975	2260×1430×2250	
1600				2.15	17.55	0.6		2385	1070	4685	2300×1460×2470	
2000				2.61	21.50	0.6		2630	1090	4890	2380×1740×2350	

D11 Single-phase oil-Immersed distribution transformer



Product Overview

The D11 Series High-Efficiency, Low-Loss Single-Phase Transformer is suitable for agricultural production, lighting, and power supply in rural power grids and remote mountainous areas. It can also be used for energy-saving retrofits in urban power grids, offering significant energy-saving effects. The transformer can be installed either directly on a platform or on a utility pole.

The low-voltage voltage combination of this transformer is $2 \times 0.23\text{kV}$, which differs in principle and application from conventional single-phase two-wire transformers. The low-voltage current of this transformer is only half of the rated current of a conventional single-phase transformer (the voltage between a1 and a2 is twice 230V, so the current is therefore half). The greatest benefit resulting from this is that the line loss of the former is one-quarter that of the latter ($P = I^2R$). This is also the main reason why this type of single-phase transformer is widely adopted by foreign users.

Meaning of Model Numbe



Technical Specifications

D □ - M(R)-(10-160)/10 Single-Phase Oil-Immersed Distribution Transformer							
Rated Capacity (kVA)	Voltage Combination			Connection Symbol	No-Load Loss (W)	Load Loss (W)	No-Load Current (%)
	High Voltage (kV)	Tapping Range (%)	Low Voltage (kV)				
10	6 6.3 6.6 10 10.5 11	$\pm 2 \times 2.5$ ± 5	$2 \times (0.22 \sim 0.24)$ or $0.22 \sim 0.24$	li0 li6	36	212	1.1
16					44	297	1.0
20					52	346	0.9
30					64	504	0.8
40					80	630	0.8
50					96	769	0.7
63					116	918	0.6
80					128	1130	0.6
100					152	1340	0.6
125					184	1580	0.5
160					232	1920	0.5

SC(B)10 Epoxy resin cast dry-type transformer

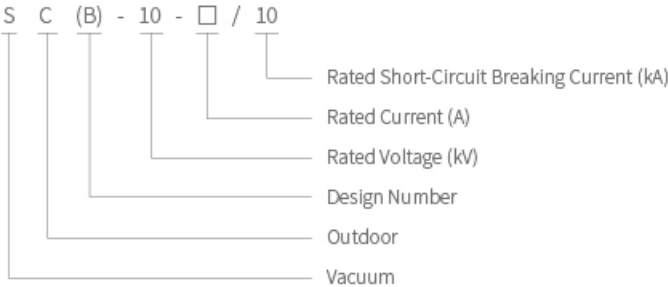


Product Overview

This product has a wide range of applications and is particularly suitable for locations with high fire protection requirements, such as mines, oil fields, subways, power plants, schools, hospitals, commercial centers, high-rise buildings, and all indoor power distribution systems.

The product complies with the following standards: GB 1094.1-5 and GB 1094.11.

Meaning of Model Numbe



Normal Service Conditions

Installation altitude: Not exceeding 1000m above sea level;

Power supply voltage waveform: Approximately sinusoidal;

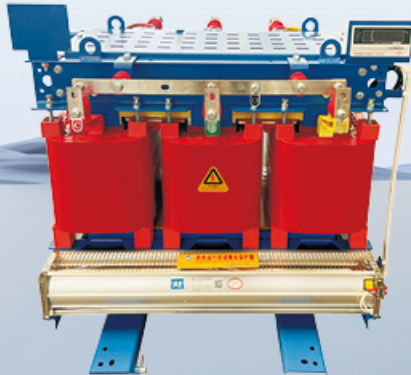
Symmetry of polyphase supply voltage: The supply voltage to which the polyphase transformer is connected shall be approximately symmetrical.

Ambient temperature: Maximum temperature $+40^{\circ}\text{C}$, maximum daily average temperature $+30^{\circ}\text{C}$, maximum annual average temperature $+20^{\circ}\text{C}$, minimum temperature -30°C (applicable to indoor transformers).

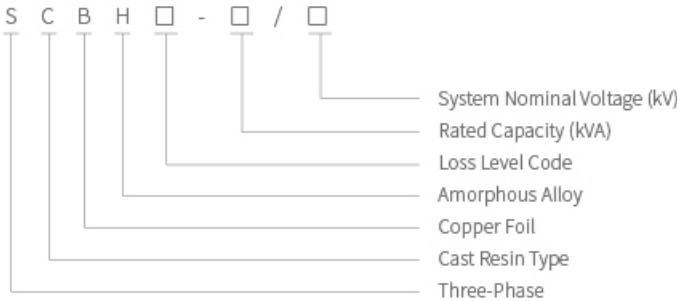
Technical Specifications

Rated Capacity (kVA)	Voltage Combination			Connection Symbol	Losses (120° C kW)		No-Load Current (%)	Impedance (%)	Weight (kg)	
	High Voltage (kV)	Tapping Range (%)	Low Voltage (kV)		Load	No-Load			Oil Weight	Total Weight
30	6 6.3 6.6 10 10.5 11	$\pm 5\%$ $\pm 2 \times 2.5\%$	0.4	Dyn11 Yyn0	0.71	0.19	1.6	4	220	250
50					1	0.27	1.4		360	410
80					1.38	0.37	1.2		450	490
100					1.57	0.4	1.1		540	580
125					1.85	0.47	1.0		630	670
160					2.13	0.54	1.0		745	795
200					2.52	0.62	0.9		850	910
250					2.75	0.72	0.8		1010	1065
315					3.47	0.88	0.8		1235	1295
400					3.99	0.98	0.7		1370	1430
500					4.88	1.16	0.7		1565	1625
630					5.87	1.34	0.6	6	1855	1930
630					5.96	1.3	0.6		1800	1875
800					6.95	1.52	0.5		2140	2215
1000					8.13	1.77	0.45		2535	2620
1250					9.69	2.09	0.45		3100	3190
1600					11.73	2.45	0.45		3705	3830
2000					14.45	3.05	0.4		4230	4380
2500					17.17	3.5	0.4		5230	5380

SCBH Three-phase dry-type amorphous alloy core distribution transformer



Meaning of Model Numbe



Technical Specifications

SCBH □ -(30-2500)/10 Three-Phase Dry-Type Amorphous Alloy Core Distribution Transformer (Class 1 Energy Efficiency Level)														
Rated Capacity (kVA)	Voltage Combination			Connection Symbol	No-Load Loss (W)	Load Loss (W)			No-Load Current (%)	Impedance Voltage (%)	Sound Power Level (dB)			
	High Voltage (kV)	Tapping Range (%)	Low Voltage (kV)			130°C (B)	155°C (F)	180°C (H)						
						100°C	120°C	145°C						
30	6 6.3 6.6 10 10.5 11	±2 ×2.5 ±5	0.4	Dyn11	50	605	640	685	0.6	4.0	63			
50					60	845	900	965	0.5		63			
80					85	1160	1240	1330			65			
100					90	1330	1415	1500			0.4	65		
125					105	1565	1665	1780	66					
160					120	1800	1915	2050	66					
200					140	2135	2275	2440	0.3		67			
250					160	2330	2485	2665			67			
315					195	2945	3125	3355			69			
400					215	3375	3590	3850	0.3		69			
500					250	4130	4390	4705			70			
630					295	4975	5290	5660			71			
630									290	5050	5365	5760	0.3	71
800									335	5895	6265	6715		72
1000									385	6885	7315	7885		72
1250									455	8190	8720	9335	0.2	74
1600									530	9945	10555	11320		75
2000									700	12240	13005	14005		77
2500									840	14535	15445	16605		78

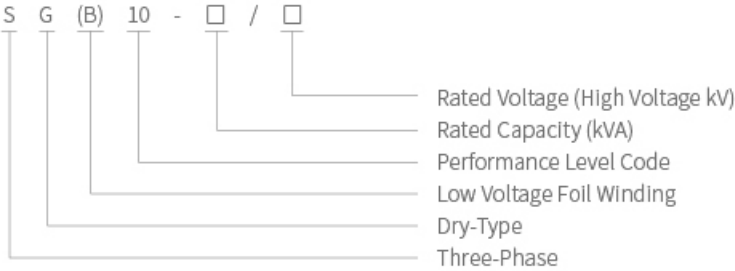
SG(B)10H Environmentally friendly dry-type transformer



Product Overview

The SG(B)10H Environmentally friendly dry-type transformer features strong thermal shock resistance, high overload capacity, flame resistance, high fire safety performance, low losses, low partial discharge levels, low noise, no emission of harmful gases, no environmental pollution, insensitivity to humidity and dust, compact size, no cracking, and easy maintenance. Therefore, it is most suitable for applications with high fire protection requirements, large load fluctuations, and harsh environments characterized by pollution and humidity. Typical applications include airports, power plants, metallurgical operations, hospitals, high-rise buildings, shopping centers, densely populated residential areas, as well as special environments such as petrochemical plants, nuclear power stations, and nuclear submarines.

Meaning of Model Numbe



Technical Specifications

Technical Parameters of 10kV Class SG(B)10 Class H Environmentally Friendly Dry-Type Transformer									
Rated Capacity (kVA)	Voltage Combination		Connection Symbol	No-Load Loss (W)	Load Loss (145°C)(W)	No-Load Current (%)	Impedance Voltage (%)	Insulation Class	Weight (kg)
	High Voltage (kV)	Low Voltage (kV)							
80	11 10.5 10 6.3 6	0.4	Dyn11 or Yyno	0.39	1.75	2.8	4	H/H	490
100				0.4	1.88	2.4			850
125				0.48	2.13	2.0			650
160				0.56	2.55	1.8			740
200				0.62	3.1	1.8			850
250				0.72	3.6	1.8			1005
315				0.88	4.6	1.8			1270
400				0.97	5.4	1.8			1470
500				1.16	6.6	1.8	1750		
630				1.35	7.9	1.6	1970		
800				1.52	9.5	1.6	2350		
1000				1.76	11.4	1.3	2620		
1250				2.08	12.5	1.3	3180		
1600				2.44	13.9	1.3	4100		
2000				3.32	17.5	1.2	4500		
2500				4.00	20.3	1.2	5340		

YCXGN-12 Solid full insulation closed loop switching equipment



Product Overview

The YCXGN-12 Solid full insulation closed loop switching equipment is a fully insulated, fully sealed, maintenance-free solid-insulated vacuum switchgear. All high-voltage live parts are cast using epoxy resin material with excellent insulation properties, organically integrating the vacuum interrupter, main current-carrying circuit, and insulation supports into a single entity. The functional units are connected via fully insulated solid busbars. As a result, the entire switchgear is unaffected by external environmental conditions, ensuring reliable equipment operation and operator safety.

This ring main unit features a simple structure, flexible operation, reliable interlocking, and easy installation. It is suitable for 50Hz, 12kV power systems and is widely used in industrial and civil cable loop networks as well as distribution network terminal projects for power reception and distribution. It is particularly suitable for applications such as power distribution in urban residential areas, small substations, switching stations, cable branch boxes, compact substations, industrial and mining enterprises, shopping malls, airports, subways, wind power generation, hospitals, stadiums, railways, and tunnels.

Thanks to its fully insulated, fully sealed, and fully shielded design, the product is especially suitable for use in harsh environments such as high altitudes, high temperatures, humid and hot conditions, severe cold, and heavily polluted areas.

Meaning of Model Number

YCXGN - 12 / 630 ☐ ☐ - ☐

Rated Short-Time Withstand Current (kA)

B: Without earthing switch; Z: Bottom straight outlet

Switch category: C - Load switch; V - Circuit breaker; G - Disconnecter; F - Load switch-fuse combination unit

Rated Current (A)

Rated Voltage (kV)

Solid Fully Insulated Enclosed Ring Main Unit

Technical Specifications

Item			Unit	Data	
Rated Voltage			kV	12	
Rated Frequency			Hz	50	
Rated Current			A	630	1250
Rated Insulation Level	Power Frequency Withstand Voltage	Break	kV	48	
		Phase to Phase	kV	42	
		Phase to Earth	kV	42	
	Lightning Impulse Withstand Voltage	Break	kV	85	
		Phase to Phase	kV	75	
		Phase to Earth	kV	75	
Rated Short-Circuit Breaking Current (1s)			kA	25	31.5
Rated Short-Time Withstand Current (4s)			kA	25	31.5
Rated Peak Withstand Current (1p)			kA	63	80
Rated Short-Circuit Making Current (Peak) (1ma)			kA	63	80
Protection level				IP4X	
Mode of Operation				Spring stored energy type	

YCXGN □ -12 Fully insulated inflatable ring network switchgear



Product Overview

The YYCXGN □ -12 Fully insulated inflatable ring network switchgear manufactured by the company has passed the type test of the National High Voltage Apparatus Testing Center. The product is widely used in 10kV/6kV power distribution systems and is a preferred switchgear product for various urban and rural user power transformation and distribution systems.

The YCXGN □ -12 Fully insulated inflatable ring network switchgear complies with GB standards and has a designed service life exceeding 30 years when operated under indoor conditions (20° C).

Technical Specifications

Item	Unit	C module	F module	V module		CB module	
		Composite switch	Combination unit	Vacuum switch	Isolating / Earthing switch	Vacuum circuit breaker	Isolating / Earthing switch
Rated Voltage	kV	12	12	12	12	12	12
Rated Frequency	Hz	50	50	50	50	50	50
Power Frequency Withstand Voltage (Phase to Phase / Port)	kV	42/48	42/48	42/48	42/48	42/48	42/48
Lightning Impulse Withstand Voltage	kV	75/85	75/85	75/85	75/85	75/85	75/85
Rated Current	A	630	Note 1)	630		1250/630	1250/630
Rated Closed-Loop Breaking Current	A	630					
Rated Cable Charging Breaking Current	A	135/135					
Rated Short-Circuit Making Current (Peak)	A	50	80				
Rated Peak Withstand Current	kA	50					
Rated Short-Time Withstand Current	kA/3s	20					
Rated Short-Circuit Breaking Current	kA		31.5	20		25	25
Rated Transfer Current	A		1750				
Maximum Fuse Current	A	-	125				
Circuit Resistance	-n	≤ 300	≤ 600				
Mechanical Life	Times	5000	3000	5000	2000	5000	5000

Installation Dimensions Diagram



Unit	1Unit	2Unit	3Unit	4Unit	5Unit	6Unit
A	373	698	1023	1348	1673	1998
B	295	620	945	1270	1595	1920

YCXGN-12(C、F、V) Environmental gas insulated metal-enclosed switchgear



Product Overview

The YCXGN-12(C、F、V) Environmental gas insulated metal-enclosed switchgear is a distribution switchgear that uses a vacuum interrupter for arc extinction, environmentally friendly gas as the main insulating medium, and a small number of solid insulation support components. The main circuit is completely unenclosed. Under normal operation, the gas pressure is either zero gauge pressure or slightly positive (air pressure inside the gas tank ≤ 0.02 MPa), and the phase-to-ground and phase-to-phase insulation capability meets the air insulation requirements at zero gauge pressure.

Service Environmental Conditions

Maximum temperature: +40°C ;
Minimum temperature: -25°C ;
24-hour average temperature: $\leq 35^\circ\text{C}$;
Maximum average relative humidity: 24-hour average $\leq 95\%$, monthly average $\leq 90\%$;
Altitude: $\leq 2000\text{m}$, shall be specified when ordering;
For special operating conditions beyond the normal service environment, please consult with our company in advance.

Technical Specifications

Item	C Module	F Module	V Module	
	Composite Switch	Combination Unit	Vacuum Switch	Isolating / Earthing Switch
Rated Voltage	12			
1min Power Frequency Withstand Voltage	42/48			
Lightning Impulse Withstand Voltage	75/85			
Rated Current	630	125*	630	630
Breaking Capacity				
Closed-Loop Breaking Current	630			
Cable Charging Breaking Current	135			
5% Active Load Breaking Current	31.5			
Earth Fault Breaking Current	200			
Short-Circuit Breaking Current		31.5*	25	
Rated Transfer Current		1500		
Maximum Fuse Current		125		
Short-Circuit Making Current	63	80*	25	
Short-Time Withstand Current	25		25	25
Short-Circuit Duration	4		4	4
Mechanical Life	5000	5000	10000	3000
Gas Pressure	0.025 (20°C)			
Annual Leakage Rate	$\leq 0.05\%$			
Arc Extinguishing Method	Vacuum Arc Extinguishing			
Protection level	IP67 / 3X (Gas Tank / Enclosure)			

YCXGN □ -12 AC high voltage metal-enclosed ring network switchgear



Product Overview

The YCXGN □ -12 AC high voltage metal-enclosed ring network switchgear uses an SF₆ switch as the main switch, with the entire cabinet employing air insulation. It is suitable for distribution automation, featuring a compact and expandable structure, simple configuration, flexible operation, reliable interlocking, and easy installation. Satisfactory technical solutions can be provided for various user requirements. Through the adoption of sensing technology and protection circuit breakers, combined with comprehensive technical performance and a lightweight, flexible assembly scheme, the product can meet continuously changing market demands.

The main switch of the YCXGN □ -12 AC high voltage metal-enclosed ring network switchgear can be selected from ABB original SFG type SF₆ load switches, FLN series load switches, permanent magnetic mechanical vacuum circuit breakers, GE PowerVac VB series vacuum circuit breakers, etc. Two operation modes are available: manual and electric.

The YCXGN □ -12 AC high voltage metal-enclosed ring network switchgear is suitable for AC 50Hz, 12kV power systems and is widely used in industrial and civil cable loop network points and power supply terminals. It is particularly suitable for the following applications: power distribution in urban residential areas, small secondary substations, switching stations, industrial and mining enterprises, shopping malls, airports, subways, wind power generation, hospitals, stadiums, railways, tunnels, etc.

Service Environmental Conditions

Ambient temperature: Upper limit +40°C , lower limit -15°C ;
Maximum altitude of equipment installation site: 1000m;
Ambient humidity: Daily average relative humidity $\leq 95\%$, monthly average relative humidity $\leq 90\%$;
Seismic intensity not exceeding degree 8;
The ambient air shall not be significantly contaminated by corrosive or flammable gases, water vapor, etc.;
No severe pollution and frequent violent vibration.

Technical Specifications

Item	Unit	Parameter
Rated Voltage	kV	12
Rated Frequency	Hz	50
Main Busbar Rated Current	A	630
Rated Short-Time Withstand Current / Duration of Main Circuit and Earthing Circuit	kA/s	20/3, 20/20
Rated Peak Withstand Current of Main Circuit and Earthing Circuit	kA	50
Rated Short-Circuit Making Current of Main Circuit and Earthing Circuit	kA	50
Full-Capacity Breaking Operations of Load Switch	Times	100
Fuse Breaking Current	kA	31.5, 40, 50
Mechanical Life	Times	2000
1min Power Frequency Withstand Voltage (RMS) Phase to phase, phase to earth / Isolating break	kV	42/48
Lightning Impulse Withstand Voltage (Peak) Phase to phase, phase to earth / Isolating break	kV	75/85
Auxiliary Circuit 1min Power Frequency Withstand Voltage	kV	2

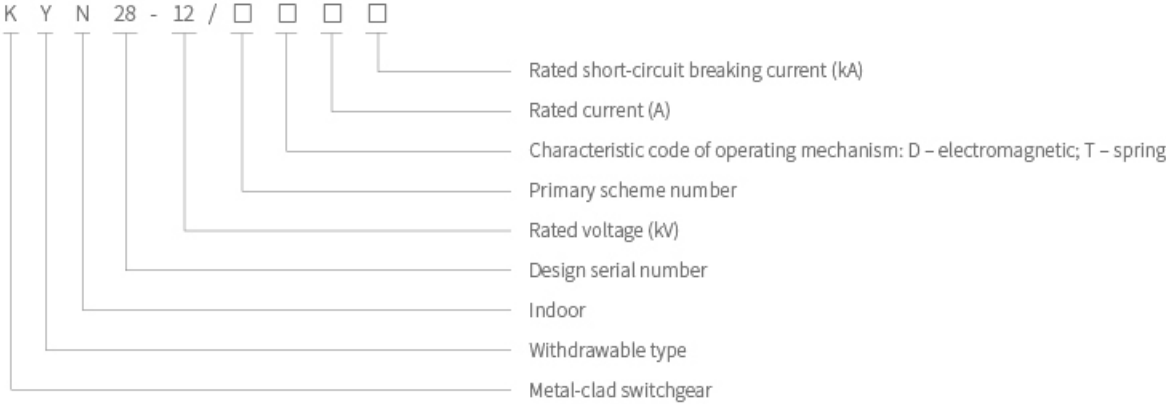
KYN28-12 AC metal-armored removable switchgear



Product Overview

KYN28-12 AC metal-armored removable switchgear is suitable for 3.6–12kV three-phase AC 50Hz power networks, for receiving and distributing electrical energy, as well as for controlling, monitoring, and protecting circuits. It can be used in single-busbar, single-busbar sectionalized, or double-busbar systems. The switchgear complies with the requirements of standards such as IEC 60298 "AC metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV", IEC 60694 "Common specifications for high-voltage switchgear and controlgear standards", the Chinese standard GB 3906 "3–35kV AC metal-enclosed switchgear", DL/T 404 "Ordering conditions for indoor AC high-voltage switchgear", as well as the German standard DIN VDE 0670 "AC switchgear for rated voltages above 1 kV". It also features complete and reliable anti-misoperation functions.

Meaning of Model Numbe



Technical Specifications

Item	Unit	Parameter
Rated voltage	kV	12
Rated current of main busbar	Hz	50
Rated frequency	A	630,1250, 1600,2000,2500,3150
Rated current	A	630,1250, 1600,2000,2500,3150
Rated short-time withstand current of earthing circuit (2s)	kA	13.9,17.4,21.8,27.4,34.8
Rated short-time withstand current of main circuit (4s)	kA	16,20,25,31.5,40
Rated peak withstand current (peak value)	kA	40,50,63,80,100
Rated short-circuit breaking current	kA	25,31.5,40
Rated insulation level	1 min power-frequency withstand voltage	kV Phase to phase and phase to earth: 42; Break: 48
	Lightning impulse withstand voltage	kV Phase to phase and phase to earth: 75; Break: 48
Protection level		Enclosure: IP4

GIS-40.5kV SF₆ Gas insulated switchgear



Product Overview

GIS-40.5kV SF₆ Gas-Insulated Switchgear adopts low-pressure SF₆ gas as the main insulating medium. It is a new type of switchgear capable of receiving and distributing electrical energy, as well as performing functions such as control, protection, measurement, monitoring, and communication during normal operation and fault conditions of power systems. It holds broad application prospects in fields such as green new energy power generation grid connection, distribution system upgrading and retrofitting, rail transit, and overseas export projects.

Product Features

Safety and reliability: The high-voltage components of this switchgear use low-pressure SF₆ gas as the insulating medium and are sealed inside a stainless steel enclosure, which isolates them from the external environment. This effectively prevents contamination, moisture, foreign matter, and other forms of harmful influence, improving insulation reliability while offering excellent aging resistance and corrosion protection.

Compact structure: Mature vacuum switching technology is adopted, providing stable and reliable interrupting performance and long service life. The vacuum interrupters are horizontally arranged inside the gas-filled enclosure, making full use of their excellent interrupting capabilities. The design is compact, with superior performance and high reliability.

Maintenance-free: Cone-type cable plug-in technology is employed. Cables, lightning arresters, and PTs can all be connected via plug-in connections, offering greater insulation capability. The gas tank features a dual-chamber design: the three-position switch and main busbar are housed in one chamber, while the circuit breaker unit occupies the other. The product meets State Grid requirements and supports one-key sequential control.

Easy installation: Solid insulated busbars are used, avoiding issues related to SF₆ gas field handling such as vacuuming, gas filling, and moisture treatment during on-site installation, expansion, or operation of gas-insulated switchgear. This greatly facilitates on-site installation.

Intelligent configuration: An intelligent control and protection unit monitors the operating status of components such as the circuit breaker, three-position disconnecting switch, and charging spring, as well as the gas pressure inside the sealed enclosure. It controls circuit breaker closing/opening and three-position disconnecting switch operations, enabling automated relay protection.

Technical Specifications

Item	Unit	Parameter
Rated voltage	kV	40.5
Rated current	A	1250/1600/2000/2500/3150
Rated frequency	Hz	50
Rated power-frequency withstand voltage	kV	Phase to phase, phase to earth 95
		Isolating break 118
Rated lightning impulse withstand voltage	kV	Phase to phase, phase to earth 185
		Isolating break 215
Auxiliary Circuit Power Frequency Withstand Voltage	V	2000
Rated Short-Time Withstand Current (4s)	kA	25/31.5/40
Rated Peak Withstand Current	kA	63/80/100
Rated Short-Circuit Making Current (Peak)	kA	63/80/100
Rated Short-Circuit Breaking Current	kA	25/31.5/40
Rated Operating Sequence		O-0.3s-CO-180s-CO
Mechanical Life	Circuit breaker	10000
	Disconnecter	3000
	Earthing switch	3000
Protection level		Gas tank IP67 / Enclosure IP4X
Gas Insulation		SF ₆
Annual Gas Leakage Rate	years	≤ 0.05%

YCHX(DFW)-12 box type outdoor switch station



Product Overview

With the increasing intensification of urban development, many existing civil-construction-type switching stations have become constrained by land availability and urban planning regulations. As a result, a more advanced and practical outdoor intelligent switching station (outdoor ring main unit) has emerged. This type of switching station requires no civil construction, occupies minimal land area, offers flexible configuration, provides more reliable power supply, significantly shortens construction, installation, and commissioning time, and reduces overall costs.

With the advancement of modern industry, the demand for automation and intelligence in electrical control equipment is continuously increasing. It has become an inevitable trend and development direction to integrate monitoring, protection, control, and metering of power equipment under both normal and fault conditions by utilizing modern electronic technology, sensor technology, communication technology, and computer network technology, thereby achieving effective management.

The ring main unit (switching station) integrates 12/24kV switchgear, circuit breakers, load switches, current and voltage transformers, 12/24kV power PTs, station FTUs, RTUs, communication control units (CCUs), 12/24kV metering and automatic meter reading systems, UPS power supplies, indicating instruments, etc., all pre-installed and tested inside a movable, sealed, moisture-proof stainless steel enclosure. This achieves the integration of primary and secondary systems in urban distribution networks as well as modular assembly, shortens construction periods, and greatly improves the reliability of urban power grid operation.

Technical Specifications

Item			Unit	Load switchgear	Combination unit
Rated Voltage			kV	12	
Rated Frequency			Hz	50	
Rated Current			A	630	200
Rated Load Breaking Current			A	630	630
Rated Short-Time Withstand Current (RMS)			kA	20kA	
Rated Short-Circuit Duration			s	3s	
Rated Peak Withstand Current			kA	50 / 63	
Closed-Loop Breaking Current			A	630	
Rated Cable Charging Breaking Current			A	25	
Rated No-Load Transformer Breaking Current			A	16	
Rated Transfer Breaking Current			A	1750	
Prospective Short-Circuit Breaking Current of Fuse (RMS)			kA	63	
Short-Time Withstand Current / Duration of Earthing Switch			kA	25kA/1s	
Rated Current Breaking Operations			次	≥ 200	
Mechanical Life			次	≥ 2000	
Annual SF6 Gas Leakage Rate				Not greater than 1%	
Rated Insulation Level	1min Power Frequency Withstand Voltage (RMS)	Across the break	kV	48	
		Phase to phase	kV	42	
		Phase to earth	kV	42	
	Lightning Impulse Withstand Voltage (Peak)	Across the break	kV	85	
		Phase to phase	kV	75	
		Phase to earth	kV	75	
Spring operating mechanism				Manual, upgradeable to motorized	
Operating voltage			V	DC 48V/AC 220V	
External insulation creepage distance ratio			mm/kV	≥ 20	
Opening non-simultaneity			ms	< 5	
Closing non-simultaneity			ms	< 5	
Main circuit resistance			uΩ	< 140	
Protection level of enclosure				IP4X	

DFW European style cable branch box



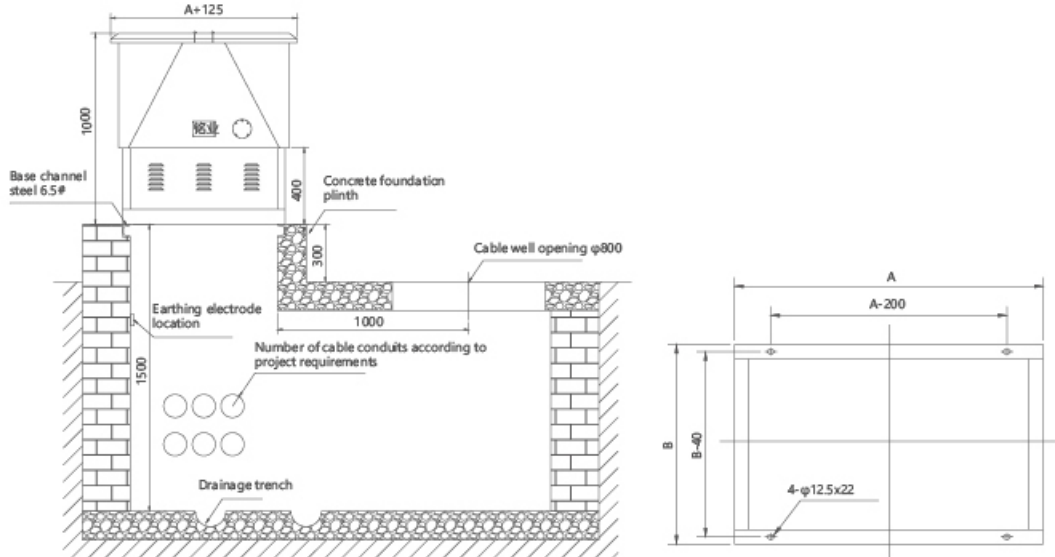
Product Overview

The European-type cable branch box is a cable-based engineering device widely used in power distribution networks in recent years. Its main characteristics include double-sided doors and the use of plug-in bushings as connecting busbars, offering significant advantages such as compact length, clear cable arrangement, and no need for large-span crossing of three-core cables. The cable connectors used comply with the DIN 47636 standard. Typically, 630A rated current bolted fixed cable connectors are adopted.

Technical Specifications

Item	Unit	Parameter
Rated Current	kV	12kV
Rated Current	A	630A
Dynamic Withstand Current	kA/s	50kA/0.3s
Thermal Withstand Current	kA/s	20kA/3s
1 Minute Power Frequency Withstand Voltage	kV	42kV
15 Minute DC Withstand Voltage	kV	52kV
Lightning Impulse Withstand Voltage	kV	105kV
Enclosure Protection Class		IP33

Installation Dimensions Diagram



Number of branches	2	3-4	5-6	7-8	9-12
A	550	850	1090	850	1090
B	550	550	550	650	650