

KYN28A-12 Metal-Claded Withdrawable AC Metal-Enclosed Switchgear



Overview

KYN28A-12(Z)(GZS1) type metal-claded withdrawable AC metal-enclosed switchgear, it is suitable for three-phase AC 50Hz power system, used to receive and distribute electric energy and control, protect and monitor the circuit.

This product meets the standards: GB3906 "Alternating-current metal-enclosed switchgear and controlgear for rated voltage above 3.6kV and up to and including 40.5kV", GB/T11022 "Common specifications for high-voltage switchgear and controlgear standards", IEC60298 "A.C. metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52kV" .

Normal Use Conditions

- Ambient air temperature: -15℃~+40℃.
- Humidity conditions: Daily average relative humidity: ≤95%.

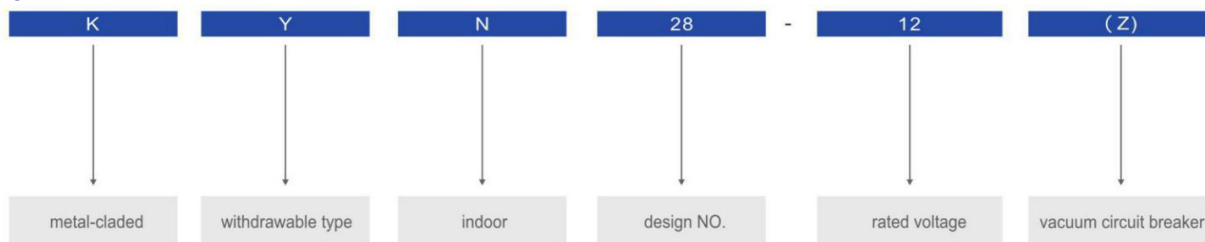
The daily average water vapor pressure ≤2.2kPa.

The monthly average relative humidity is 90%.

The monthly average water vapor pressure is 1.8kPa.

- Altitude: <1000m.
- Earthquake intensity: ≤8 degrees.
- The surrounding air should not be significantly polluted by corrosive or combustible gas, water vapor, etc.
- Places without frequent severe vibration.
- When used under normal conditions exceeding GB3906, the user and the manufacturer shall negotiate.

Type Description



Product Features

- The enclosure of the product is entirely made of aluminum-zinc-coated steel sheet processed by machine tools and assembled with bolts after multiple bending and forming. It has high mechanical strength, which effectively ensures the neatness and beauty of the product. The cabinet door is coated with plastic. It has strong impact resistance and corrosion resistance, and the product enclosure with IP4X protection level.
- The main switch of this product can be equipped with VD4 type vacuum circuit breaker and C3 series fixed load switch produced by ABB, and it can also be equipped with a variety of domestic series vacuum circuit breakers (such as VS1, VH1, VK, ZN28) to replace foreign similar product.
- Regardless of the circuit breaker selected, the air insulation distance of the bare conductor can be guaranteed to be greater than 125mm, and the composite insulation is greater than 60mm. The circuit breakers have the unique advantages of long life, high parameters, low maintenance, and small size. KYN28-12 metal-claded mid-mounted metal-enclosed switchgear is suitable for 3.6-12kV three-phase AC 50Hz power grids, which is used for receiving and distributing electric energy, and for controlling, monitoring and protecting circuits. It can be used for single bus, single bus section system or double bus system. The switchgear complies with IEC298 "A.C. metal-enclosed switchgear and controlgear for rated voltages above 1kV and up to and including 52kV", IEC694 "Common clauses for high-voltage switchgear and controlgear standards" China GB3906 " Alternating-current metal-enclosed switchgear and controlgear for rated voltages above 3.6kV and up to and including 40.5kV" and DL404 "Alternating-current metal-enclosed switchgear and controlgear for rated voltages above 3.6kV and up to and including 40.5kV" Germany 0670 "A.c. switchgear and controlgear for voltages above 1kV" and other standards. And it has perfect and reliable anti-misoperation function.

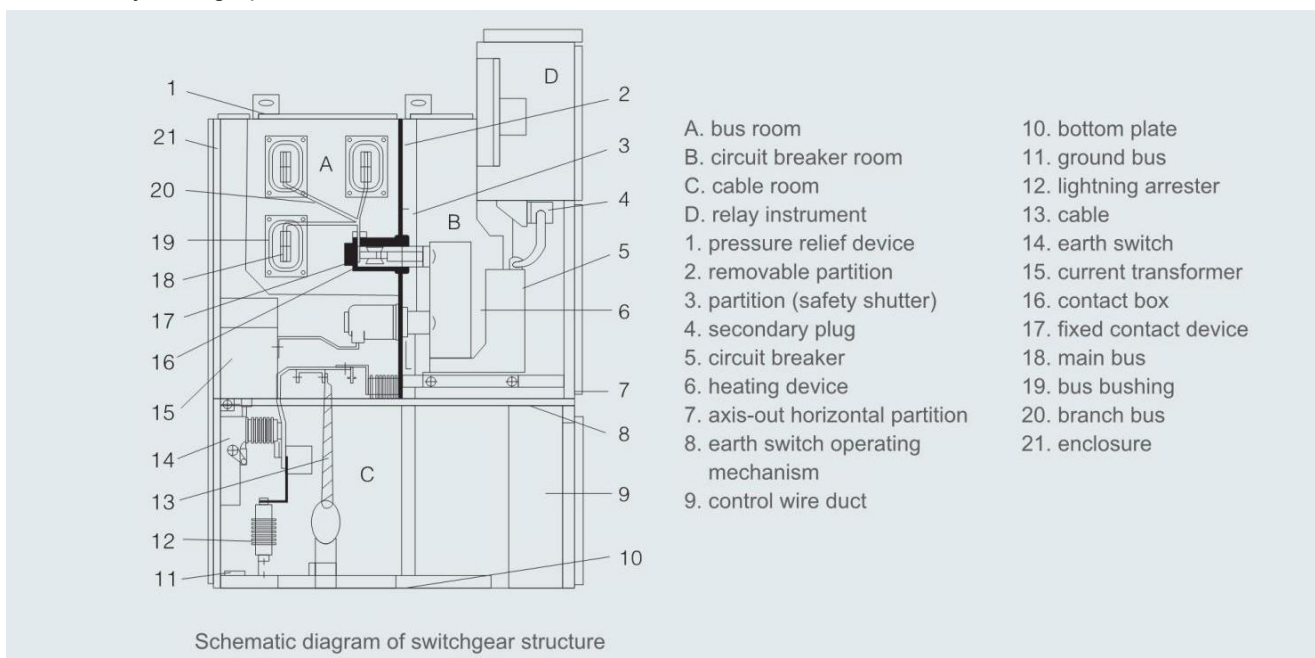
Main Technical Parameters

Item		Unit	Value
Rated voltage		kV	3.6, 7.2, 12
Rated frequency		Hz	50
Rated current of circuit breaker		A	630, 1250, 1600, 2000, 2500, 3150
Rated current of switchgear		A	630, 1250, 1600, 2000, 2500, 3150
Rated short time withstand current (4s)		kA	20, 25, 31.5, 40
Rated peak withstand current (peak value)		kA	50, 63, 80, 100
Rated short circuit breaking current		kA	20, 25, 31.5, 40
Rated short circuit making current (peak value)		kA	50, 63, 80, 100
Rated insulation level 1min power frequency withstand voltage	Phase-to-phase, phase-to-earth	kV	25, 30, 42
	Across open contacts	kV	27, 34, 48
Lightning impulse withstand voltage (peak value)	Phase-to-phase, phase-to-earth	kV	40, 60, 75
	Across open contacts	kV	46, 70, 85
Protection level			IP4X outside the shell, IP2X when the compartment and circuit breaker door are opened

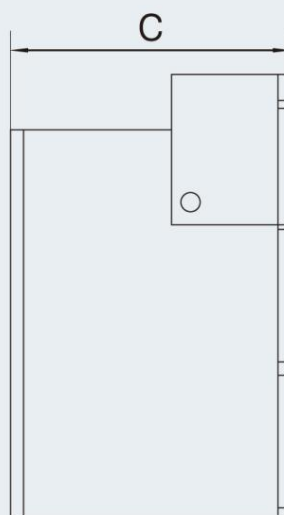
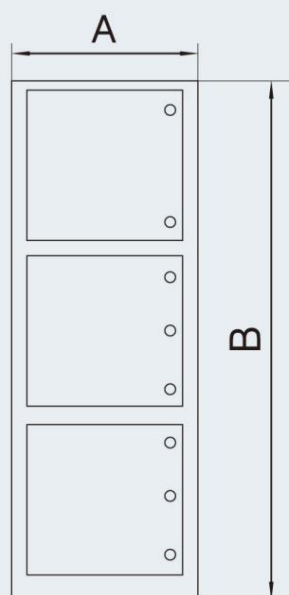
Functions

The switchgear structure is shown in the figure below. The all-metal modular assembly structure, the cabinet body is made of imported aluminum-zinc plate with strong anti-corrosion ability, without surface treatment, processed by CNC high-precision equipment, using advanced multi-folding technology, connection It is connected with blind rivet nuts and high-strength bolts, with high precision, light weight and good strength.

The switchgear can be equipped with the ZN63A-12 (VS1) series, VD4 series, ZN65 series and other vacuum circuit breakers produced by Ghorit, with wide adaptability and strong interchangeability. The handcart is equipped with a working position, a test position, and each position has a positioning and display device, which is safe and reliable. The cable room can be equipped with up to 9 single-core cables. The equipment has reliable mechanical and electrical locks to fully meet the "five prevention" requirements. Each room is equipped with pressure relief channels to ensure personal safety during operation.



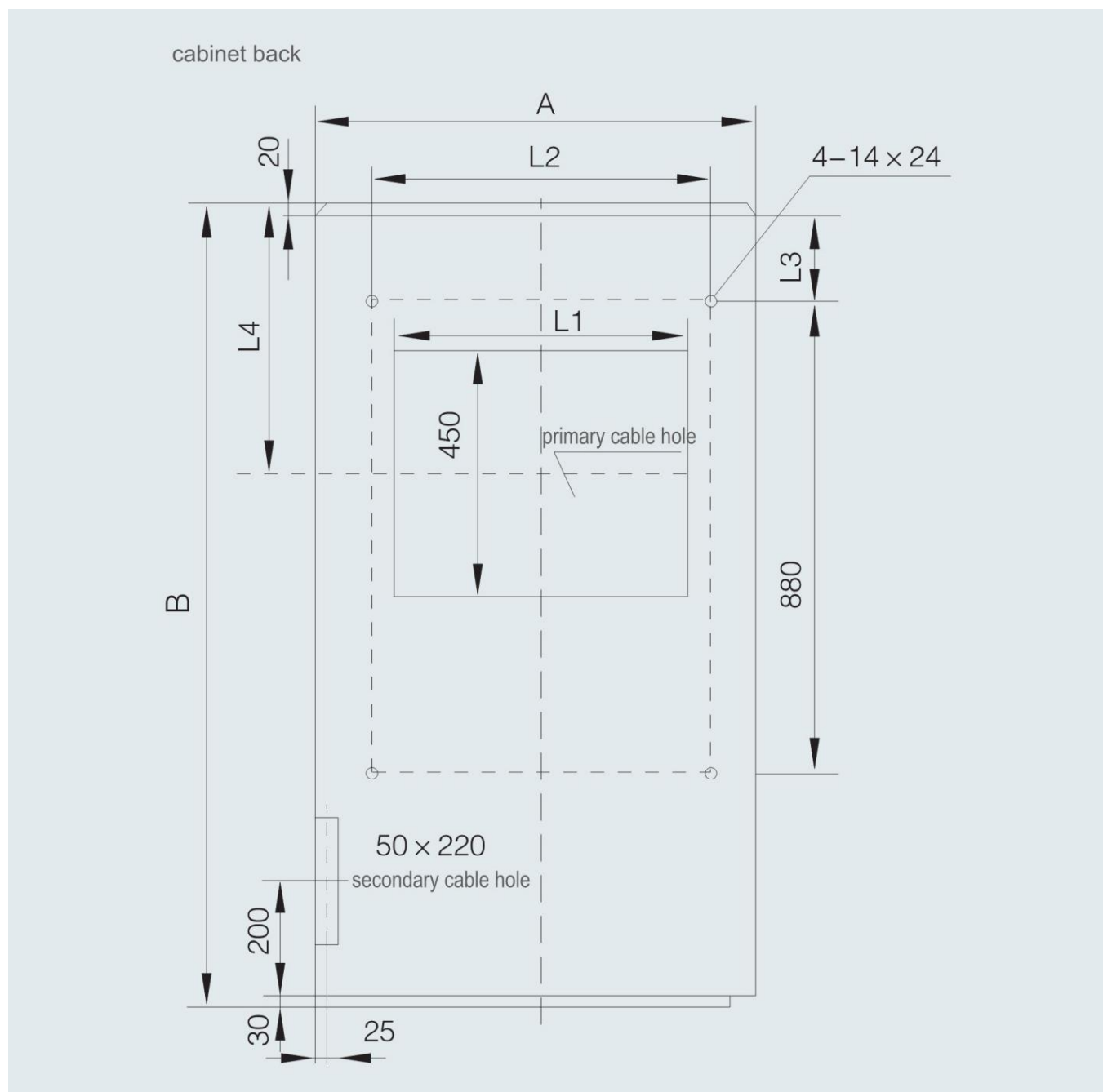
Overall Dimensions



Unit: mm

Height B		2300(2200)
Width A	Rated current up to 1250A	800
	Rated current 1600A and above(altitude 4000m rated current 1250A)	1000
Depth C	Cable inlet and outlet	1500
	Overhead inlet and outlet	1660

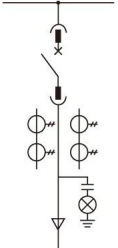
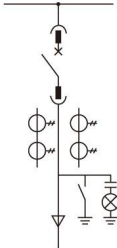
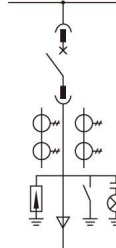
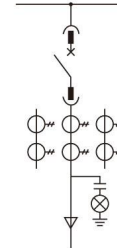
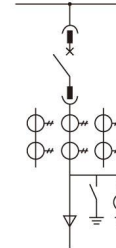
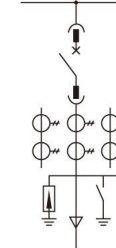
Installation Dimensions

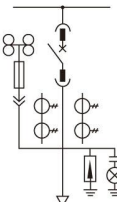
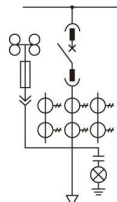
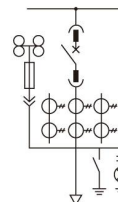
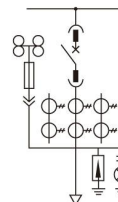
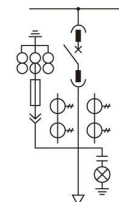
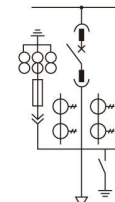




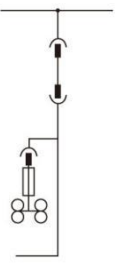
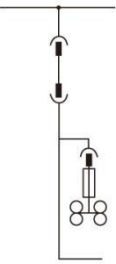
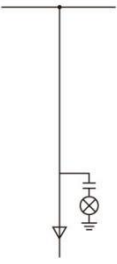
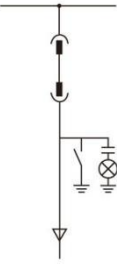
Unit: mm

Switchgear width A	Switchgear depth B	L1	L2	L3	L4
800	1500 cable	530	630	150	490
	1660 overhead	530	630	310	650
1000	1500 cable	730	830	150	490
	1660 overhead	730	830	310	650

Main Circuit Schematic Drawing

scheme NO.		1	2	3	4	5	6
main circuit schematic drawing							
switchgear dimensions		800×1500×2300					
(W*D*H)mm		1000×1500×2300					
rated current (A)		630~3150					
main components	VCB	1	1	1	1	1	1
	CT LZZBJ9 series	2	2	2	3	3	3
	earth switch JN15		1	1		1	1
	arrester HY5W			3			3
circuit name		incoming, outgoing					
remarks		1. rated current 1600A and above, the switchgear width is 1000mm.					
		2. altitude 3000~4000m plateau type switchgear rated current 1250A, the switchgear width is 1000mm.					

scheme NO.		7		8		9		10		11		12			
main circuit schematic drawing															
		switchgear dimensions													
		800×1500×2300													
		(W*D*H)mm		1000×1500×2300											
		rated current (A)		630~3150											
main components	VCB	1		1		1		1		1		1			
	CT LZZBJ9 series	2		3		3		3		2		2			
	VT	JDZ10-10	2	JDZ10-10	2			JDZ10-10	2	JDZ10-10	3	JDZ10-10	3		
	HV fuse RN2-10	3		3		3		3		3		3			
	earth switch JN15					1						1			
	arrester HY5W	3						3							
circuit name		cable incoming+PT													
remarks		Rated current 1600A and above, the switchgear width is 1000mm.													

scheme NO.		19	20	21	22	23	24
main circuit schematic drawing							
switchgear dimensions (W*D*H)mm		800×1500×2300 1000×1500×2300					
rated current (A)		630~3150					
main components	VT			JDZX10-10	2	JDZX10-10	2
	HV fuse RN2-10			3	3		
	arrester HY5W						1
circuit name		disconnecter+ connection (left)	disconnecter+ connection (right)	disconnecter+ connection (left)+voltage measurement	disconnecter+ connection (right)+voltage measurement	outlet convert phase	disconnecter outlet convert phase
remarks		Rated current 1600A and above, the switchgear width is 1000mm.					