ZN28-12K indoor high voltage VCB for 12kV switchgear

Specification

ZN28-12K indoor high voltage VCB is a three-phase AC 50Hz, rated voltage of 12kV indoor switchgear. Our company with its own research and development of permanent magnetic actuator for industrial and mining enterprises, power generation and substation facilities as electrical control and protection purposes. The product has high reliability and long life characteristics, especially suitable for frequent operation, repeatedly breaking conditions, such as short-circuit current of the place.

Parameters

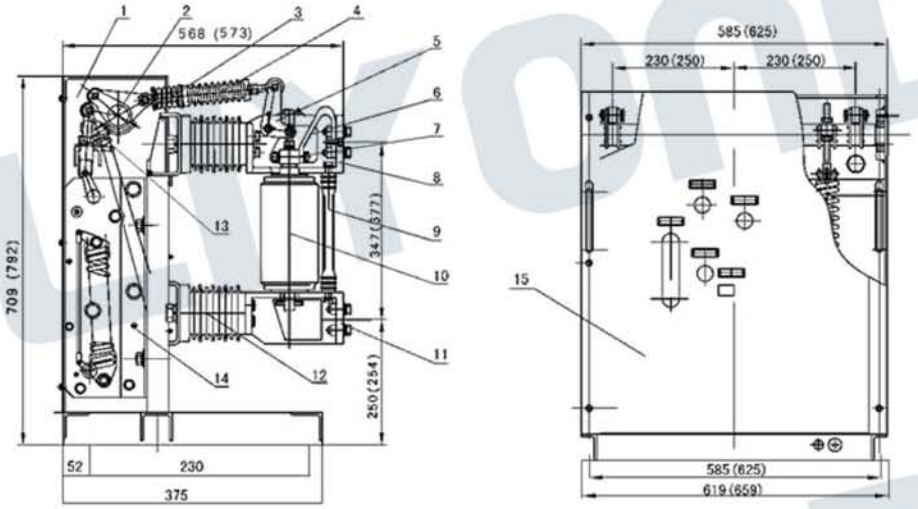
C

S.N	Name		Unit	Data			
1	Rated voltage		kV	12			
2	Rated frequency		Hz	50/60			
3	Rated current		A	630	630	1250	1600
				1000	1000	1600	2000
				1250	1250	2000	2500
							3150
4	Rated short circuit breaking current		kA	20	25	31.5	40
5	Rated peak withstand current		kA	50	63	80	100
6	Rated short-circuit duration		s	4			
7	Rated power frequency withstand voltage	Between phases, phase to ground	kV	42			
		Between gaps	kV	48			
8	Rated lightning impulse withstand voltage	Between phases,phase to ground	kV	75			
		Between gaps	kV	85			
9	Rated operating sequence			O-0.3s-CO-180s-CO O-180s-CO-180s-CO(40kA)			
10	Power source voltage of opening and closing circuit		V	~220/-110; -220/110			
11	Rated breaking current of single capacitor bank		A	630			
12	Rated breaking current of back to back capacitor bank		A	400			
13	Electrical endurance class		Cycle	30			
14	Mechanical endurance		Cycle	10000			
15	Operating mechanism type			CD17 I	CD17 II	CD17II	CD17 III
				CT19 I	CT19 I	CT19 I	CT19 II
16	Clearance between open contacts		mm	11±1			
17	Contact stroke of contacts		mm	4±1			
18	Out simultaneity of CO operation of three poles		ms	≤2			

Connected to the above table

S.N	Name	Unit	Data			
19	Contact bouncing duration at closing operation	ms	≤2			
20	Closing time	ms	50 - 100			
21	Opening time	ms	20 - 60			
22	Average closing speed	m/s	0.6±0.2			
23	Average opening speed	m/s	1.1±0.2			
24	Main circuit resistance of each pole	μΩ	≤40	≤40	≤40	≤30
25	D.C component		50%(Max.)			

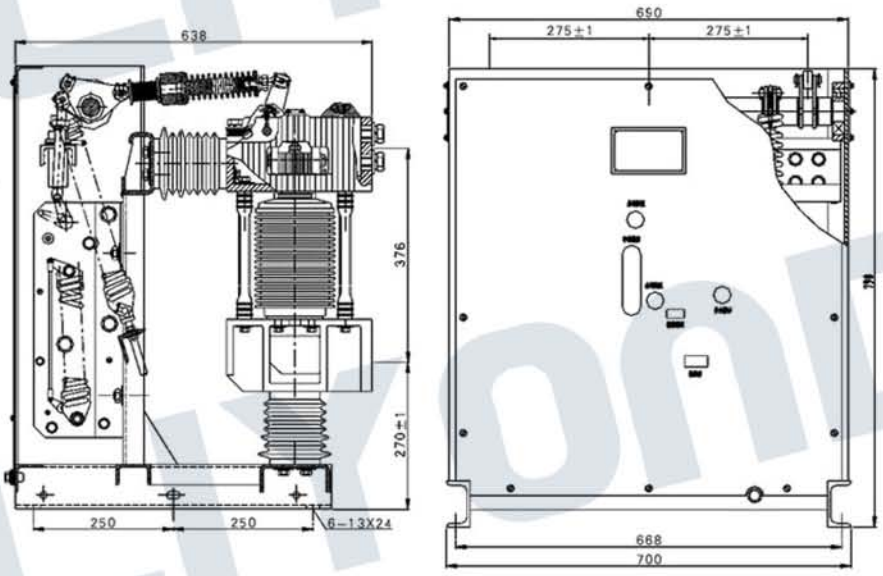
Drawing



1.Frame 2.Main shaft 3.Contact press spring 4.Operating insulator 5."L"shape shaft arm
6.Flexibar 7.Conductive clamp 8.Moving end support 9.Insulating pole 10.Vacuum interrupter
11.fixing end support 12.insulation bottle 13.Oil buffer 14.Spring operating mechanism
15.Plate

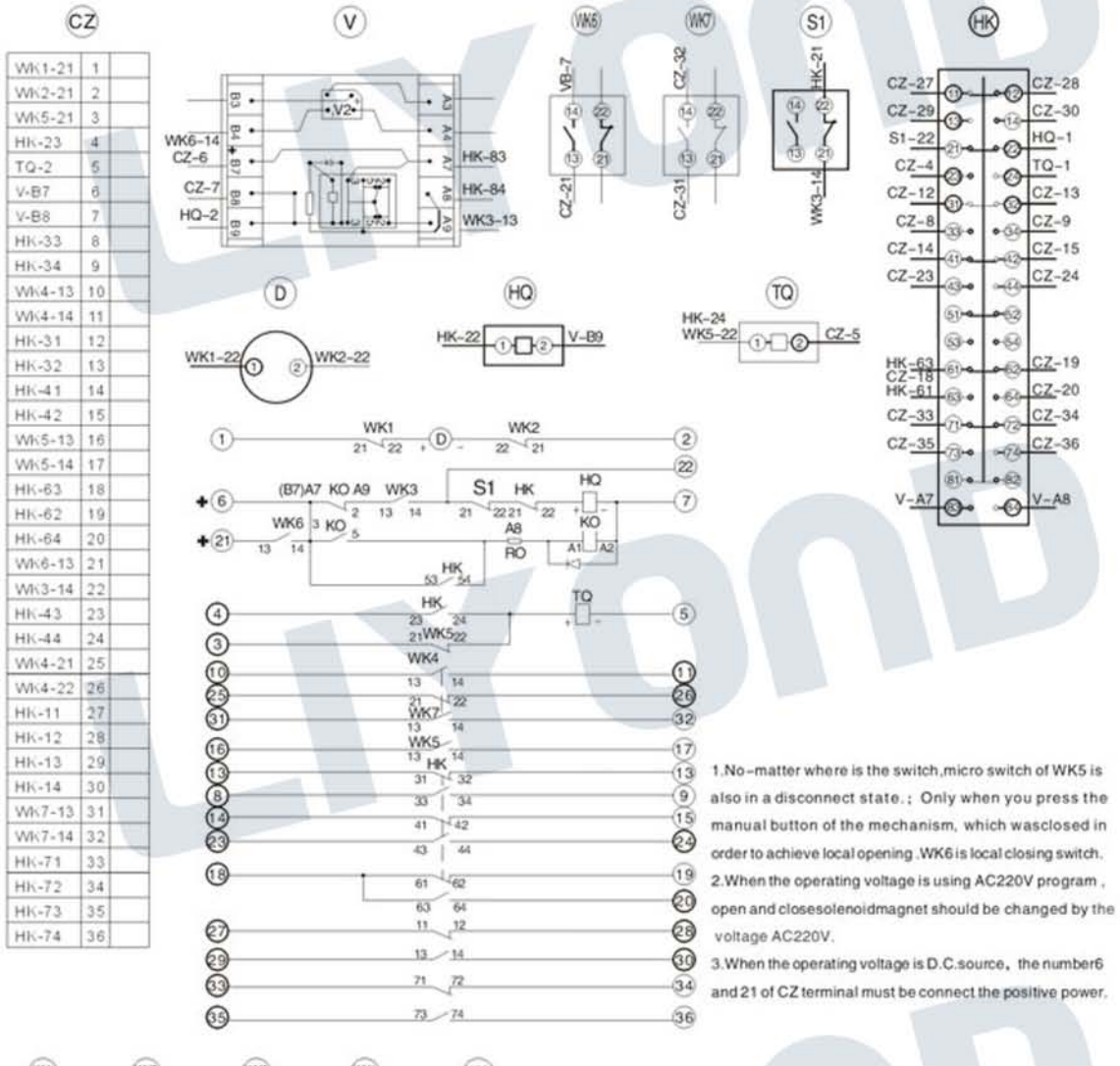
Note:The dimensions in brackets are: for the series of distance between phases of 250mm, 254 and 377 are valid for 2500A and above.

Overall outline drawing of ZN28-12K/T630 ~ 1600(3150)-20 ~ 31.5(40)type VCB



Overall outline drawing of ZN28-12K/T (D) 4000-50

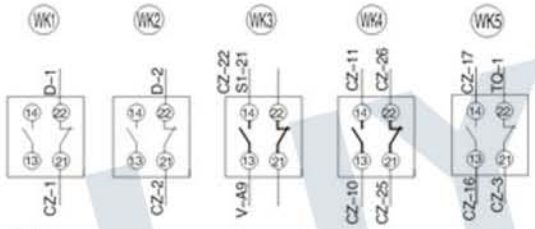
Typical wiring diagram of the second principle



1.No-matter where is the switch,micro switch of WK5 is also in a disconnect state.; Only when you press the manual button of the mechanism, which wasclosed in order to achieve local opening .WK6 is local closing switch.

2.When the operating voltage is using AC220V program , open and closesolenoidmagnet should be changed by the voltage AC220V.

3.When the operating voltage is D.C.source, the number6 and 21 of CZ terminal must be connect the positive power.



Note:
1.Both closing current and opening current are 0.9A, control voltage is -220V;
2.When without anti-jump, please disconnect auxiliary switch and be insulated.

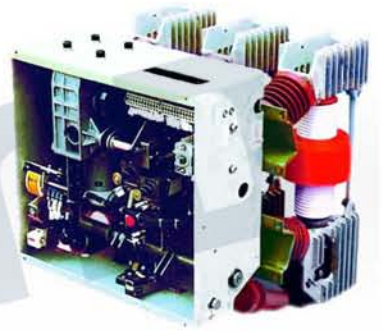
Code	Name	Type	Quantity	Note
Y7,Y8	Overcurrent release	ZN12-specific	2	
S1	Closing circuit electric interlock switch	LXW20-11	1	
D	Storage motor	HDZ-22880B	1	AC/DC220V
TQ	Tripping electromagnet	DC220V 247 Ω	1	
HQ	Closing electromagnet	DC220V 247 Ω	1	
CZ	Terminal strip	3AF	36parts	
HK	Auxiliary switch	F10-16 Ⅱ/L	1	
V	Anti-jump replay board	DC220	1	
WK1 - WK7	Micro switch	LXW20-11	7	

ZN12-12 indoor high voltage VCB for 12kV switchgear

Specification

ZN12-12 indoor high voltage VCB for 12kV switchgear

ZN12-12 indoor high voltage VCB is a three-phase AC 50Hz, rated voltage of 12kV indoor switchgear. Our company with its own research and development of permanent magnetic actuator for industrial and mining enterprises, power generation and substation facilities as electrical control and protection purposes. The product has high reliability and long life characteristics, especially suitable for frequent operation, repeatedly breaking conditions, such as short-circuit current of the place.



Parameters

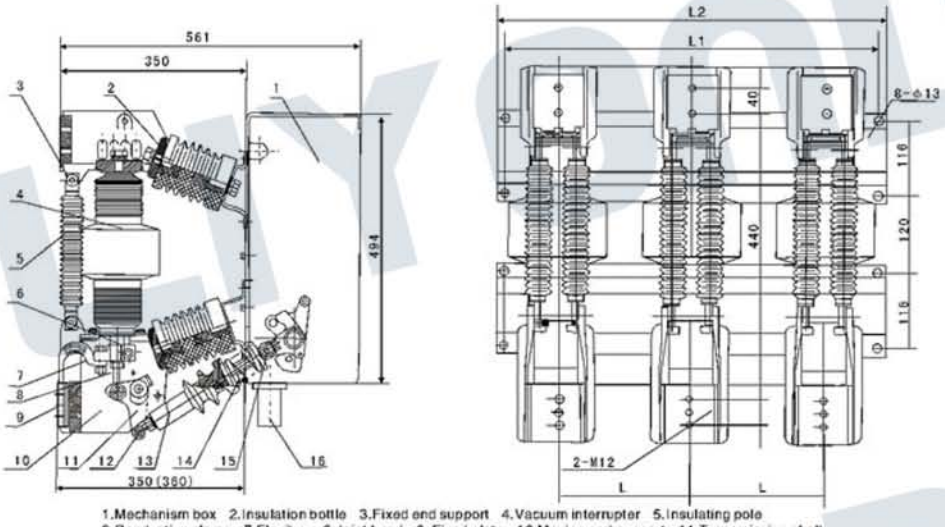
C

S.N	Name		Unit	Data		
1	Rated voltage		kV	12		
2	Rated frequency		Hz	50/60		
3	Rated current		A	630	1250	1600
				1000	1600	2000
				1250	2000	2500
				1600	2500	3150
4	Rated short circuit breaking current		kA	25	31.5	40
5	Rated peak withstand current		kA	63	80	100
6	Rated short-circuit duration		s	4		
7	Rated power frequency withstand voltage	Between phases, phase to ground	kV	42		
		Between gaps	kV	48		
8	Rated lightning impulse withstand voltage	Between phases, phase to ground	kV	75		
		Between gaps	kV	85		
9	Rated operating sequence			O-0.3s-CO-180s-CO/0-180s-CO-180s-CO (40kA以上)		
10	Power source voltage of opening and closing circuit		V	~220/110; -220/110		
11	Rated current of opening and closing coil		A	-220/0.89; -110/1.91		
12	Rated breaking current of single capacitor bank		A	630		
13	Rated breaking current of back to back capacitor bank		A	400		
14	Electrical endurance class		次	30、20		
15	Mechanical endurance		次	10000		
16	Rated voltage of energy stored motor		V	~220/110; -220/110		
17	Clearance between open contacts		mm	11±1		
18	Contact stroke of contacts		mm	7±2		

Connected to the above table

S.N	Name	Unit	Data	
19	Out of simultaneity of CO operations of three poles	ms	≤2	
20	Contact bouncing duration at closing operation	ms	≤3	
21	Closing time	ms	30~75	
22	Opening time	ms	30~60	
23	Average closing speed	m/s	0.5~0.9/0.8~1.3(40kA以上)	
24	Average opening speed	m/s	1.0~1.4/1.0~1.8(40kA以上)	
25	Main circuit resistance of each pole	μΩ	≤40	≤30
26	D.C component		50%	

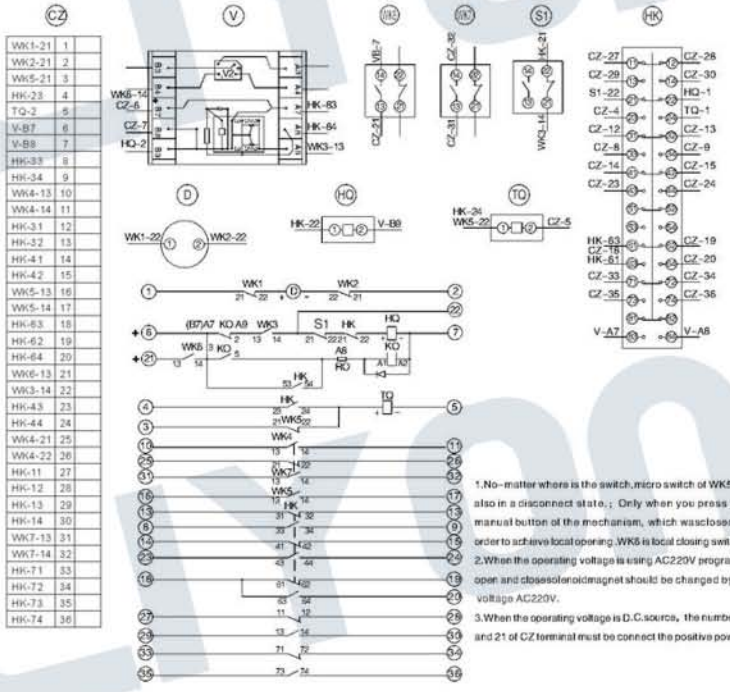
Drawing



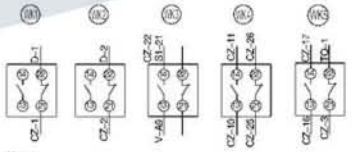
1.Mechanism box 2.Insulation bottle 3.Fixed end support 4.Vacuum interrupter 5.Insulating pole
6.Conductive clamp 7.Flexibar 8.Joint head 9. Fixed plate 10.Moving end support 11.Transmission shaft
12.Adjusting bolt 13.Insulating pulling pole 14.Contact spring 15.Shaft arm 16.Oil buffer

Note:The size in bracket is for 40kA and above products.

Type	L	L0	L1	L2	L3	Remarks
ZN12-12Y	210	215	585	610	514	With partition between phases
ZN12-12S	230	240	620	650	565	
ZN12-12W	250	240	700	740	565	
ZN12-12Q	275	215	700	740	514	



1.No-matter where is the switch,micro switch of WK5 is also in a disconnect state.; Only when you press the manual button of the mechanism, which wasclosed in order to achieve local opening.WK6 is local closing switch.
2.When the operating voltage is using AC220V program, open and closesolenoidmagnet should be changed by the voltage AC220V.
3.When the operating voltage is D.C.source, the number6 and 21 of CZ terminal must be connect the positive power.



Note:
1.Both closing current and opening current are 0.9A, control voltage is ~220V;
2.When without anti-jump, please disconnect auxiliary switch and be insulated.

Code	Name	Type	Quantity	Note
Y7,Y8	Overcurrent release	ZN12-specific	2	
S1	Closing circuit electric interlock switch	LXW2G-11	1	
D	Storage motor	HDZ-22/60B	1	AC/DC220V
TQ	Tripping electromagnet	DC220V 247 Ω	1	
HQ	Closing electromagnet	DC220V 247 Ω	1	
CZ	Terminal strip	3AF	36pwts	
HK	Auxiliary switch	F10-10J/L	1	
V	Anti-jump relay board	DC220	1	
WK1 - WK7	Micro switch	LXW2G-11	7	

ZN68-12 indoor HV vacuum circuit breaker for 12kV switchgear

Specification

ZN68-12 indoor HV vacuum circuit breaker for 12kV switch-gear

ZN68-12 indoor HV vacuum circuit breaker is a three-phase AC 50Hz, rated voltage of 12kV indoor switchgear. Our company with its own research and development of permanent magnetic actuator for industrial and mining enterprises, power generation and substation facilities as electrical control and protection purposes. The product has high reliability and long life characteristics, especially suitable for frequent operation, repeatedly breaking conditions, such as short-circuit current of the place.

Following information is required for order

Parameters

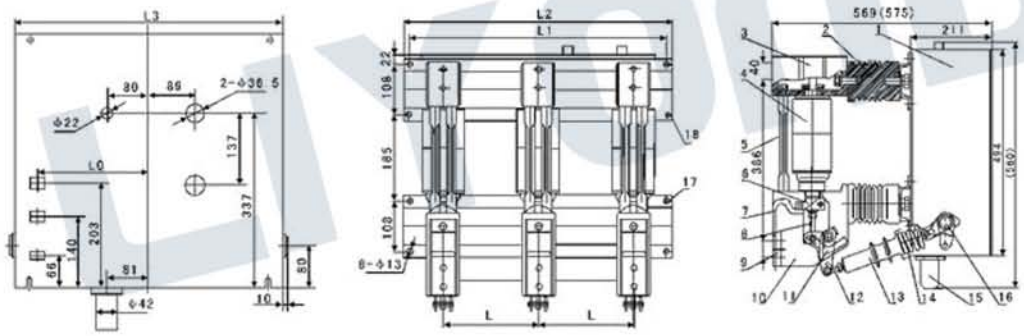
C

S.N	Name		Unit	Data				
1	Rated voltage		kV	12				
2	Rated frequency		Hz	50/60				
3	Rated current		A	630	630	1250	1600	4000
				1000	1000	1600	2000	
				1250	1250	2000	2500	
						2500	3150	
4	Rated short circuit breaking current		kA	20	25	31.5	40	50
5	Rated peak withstand current		kA	50	63	80	100	125
6	Rated short–circuit duration		s	4				
7	Rated power frequency withstand voltage	Between phases, phase to ground	kV	42				
		Between gaps	kV	48				
8	Rated lightning impulse withstand voltage	Between phases, phase to ground	kV	75				
		Between gaps	kV	85				
9	Rated operating sequence			O–0.3s–CO–180s–CO/0–180s–CO–180s–CO（40kA以上）				
10	Power source voltage of opening and closing circuit		V	~220/110; –220/110				
11	Rated current of opening and closing coil		A	–220/0.89; –110/1.91				
12	Rated breaking current of single capacitor bank		A	630				
13	Rated breaking current of back to back capacitor bank		A	400				
14	Electrical endurance class		次	30/20(40kA以上)				
15	Mechanical endurance		次	10000				
16	Rated voltage of energy stored motor		V	~220/110; –220/110				
17	Clearance between open contacts		mm	11±1				
18	Contact stroke		mm	6±2				

Connected to the above table

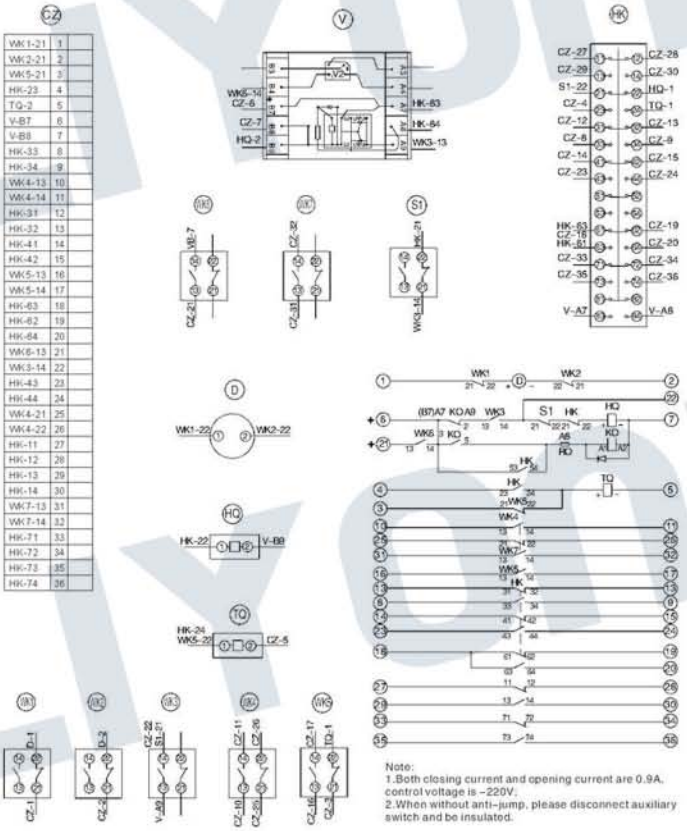
S.N	Name	Unit	Data	
19	Out of simultaneity of CO operations of three poles	ms	≤2	
20	Contact bouncing duration at closing operation	ms	≤2	
21	Closing time	ms	30~75	
22	Opening time	ms	30~60	
23	Average closing speed	m/s	0.5~0.9/0.8~1.3(40kA以上)	
24	Average opening speed	m/s	1.0~1.4/1.0~1.8	
25	Main circuit resistance of each pole	μΩ	≤40	≤30
26	D.C component		50%	

Drawing



1.Mechanism box 2.Insulation bottle 3. Fixed end support 4.Vacuum interrupter 5.Insulating pole 6.Conductive clamp
7.Flexibar 8. Joint head 9. Fixed plate 10. Moving end support 11. Transmission shaft 12. Adjusting bolt
13.Insulating pulling pole 14.Contact spring 15. Oil buffer 16. Main shaft 17. Lower installation plate
18. Upper installation plate

Models	L	L0	L1	L2	L3	Remarks
ZN68-12Y	210	215	586	610	514	With partition between phases
ZN68-12S	230	240	620	650	565	
ZN68-12W	250	240	700	740	565	
ZN68-12Q	275	215	700	740	514	



Note:
1.Both closing current and opening current are 0.9A, control voltage is ~220V;
2.When without anti-jump, please disconnect auxiliary switch and be insulated.

1.No-matter where is the switch,micro switch of WK5 is also in a disconnect state. Only when you press the manual button of the mechanism , which wasclosed in order to achieve local opening .WK5 is local closing switch.

2.When the operating voltage is using AC220V program ,open and closesolenoid magnet should be changed by the voltage AC220V.

3.When the operating voltage is D.C.source, the number 6 and 21 of CZ terminal must be connect the positive power.

Code	Name	Type	Quantity	Note
Y7,Y8	Overcurrent release	ZN12-specific	2	
S1	Closing circuit electric interlock switch	LXW20-11	1	
G	Storage motor	HGZ-22B/GB	1	AC/DC220V
TQ	Tripping electromagnet	DC220V 247 Ω	1	
HQ	Closing electromagnet	DC220V 247 Ω	1	
CZ	Terminal strip	3AF	30parts	
HK	Auxiliary switch	F10-10J/L	1	
V	Anti-jump relay board	DC220	1	
WK1-WK7	Micro switch	LXW20-11	7	

VSm-12 indoor high voltage vacuum circuit breaker for 12kV switchgear

Specification

VSm-12 indoor high voltage vacuum circuit breaker for 12kV switchgear

VSm-12 series permanent magnetic operating mechanism is a three-phase AC 50Hz, rated voltage of 12kV indoor switchgear. Our company with its own research and development of permanent magnetic actuator for industrial and mining enterprises, power generation and substation facilities as electrical control and protection purposes. The product has high reliability and long life characteristics, especially suitable for frequent operation, repeatedly breaking conditions, such as short-circuit current of the place.

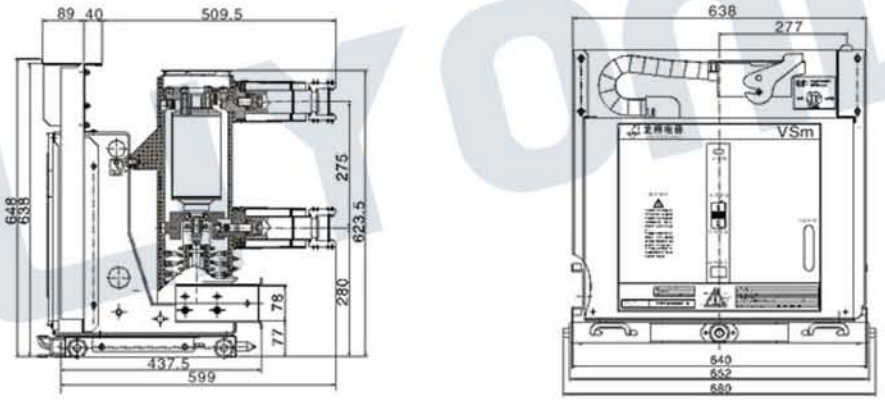
VCB full type,main technical specification,distance between phase and quantity.
Type and specification of service voltage.

Parameters

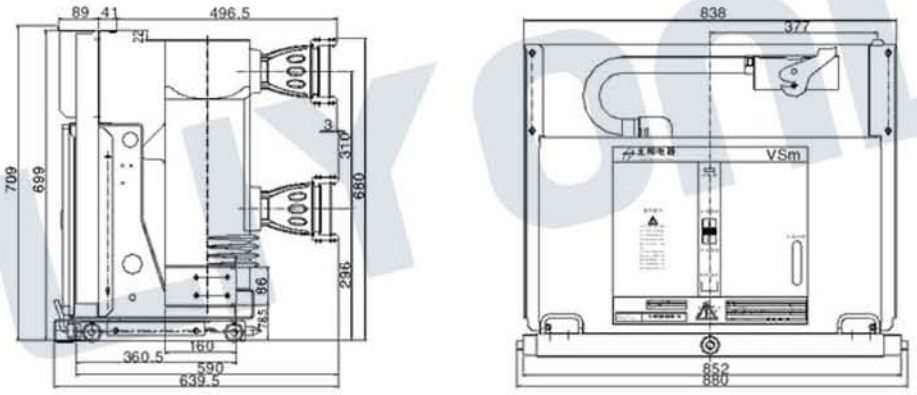
S.N	Name	Unit	Data						
1	Rated voltage	kV	12						
2	Rated current	A	630		1000	1250		1600 2000	2500 3150
3	Rated short circuit breaking current	kA	20	25	20	25	31.5	31.5	40
4	Rated peak withstand current	kA	50	63	50	63	80	80	100
5	Rated short time withstand current	kA	20	25	20	25	31.5	31.5	40
6	Rated short circuit making current	kA	50	63	50	63	80	80	100
7	Switching operations of short circuit current	Cycle	50						30
8	Rated operating sequence		O-0.3s-CO-180s-CO, O-180s-CO-180s-CO (40kA)						
9	Mechanical endurance	Cycle	30000						
10	Rated breaking operations of the rated current	Cycle	20000						
11	Rated lightning impulse withstand voltage	kV	75						
12	Rated power frequency withstand voltage	kV	42						
13	Contact stroke	mm	11 ± 1						
14	Overtravel of contacts	mm	3.5 ± 0.5						
15	Closing speed	m/s	0.6 ± 0.2						
16	Opening speed	m/s	1.1 ± 0.2						
17	Contact bouncing duration at closing operation	ms	≤2						
18	Simultaneity of three phase closing operation	ms	≤2						
19	Closing time	ms	≤75						
20	Opening time	ms	≤65						
21	Driven power voltage of permanent magnetic mechanism	V	DC220						
22	Storage time	s	<10						
23	Control voltage of closing	V	≤110,≤220						
24	Control voltage of opening	V	≤110,≤220						
25	Main circuit resistance	μΩ	≤45						
26	Distance between phases	mm	210, 275						
27	D.C component		50%						

C

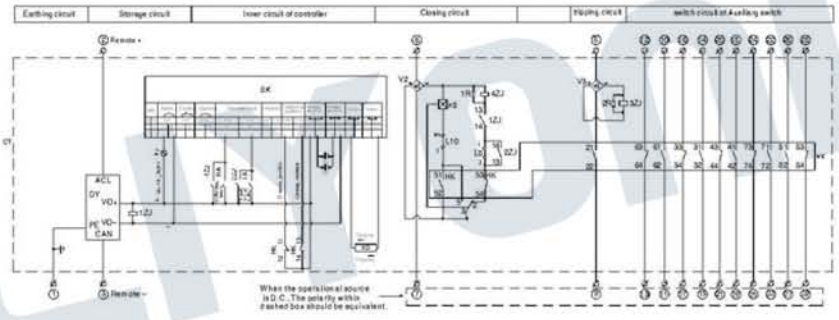
Drawing



The dimensions of withdrawable type Vacuum Circuit Breaker(rate current≤1600A)



The dimensions of withdrawable Vacuum Circuit Breaker(rate current≥2000A)

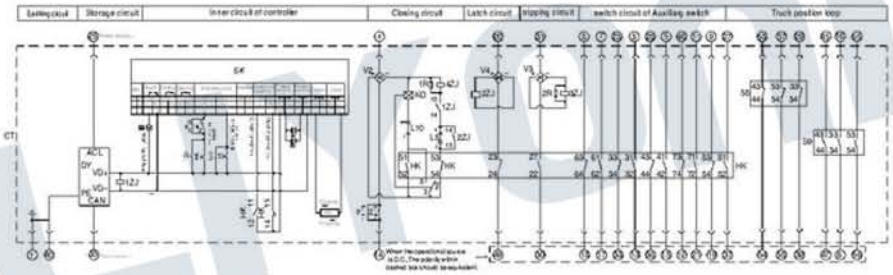


Functions	LTD (m_1)	LB (i_{11})
With anti-jump	Connect	
With interlock		Disconnect
No anti-jump	Disconnect	
No interlock		Connect

DY: Power module
Sk: Control module
Hk: Auxiliary switch of Breaker
Ha: Local closing button
Xq: Operating coil
R1-R2: Current-limiting resistance
1C、2C: Capacitance
Ta: Local opening pushbutton

Diagram for Truck Type

Drawing



Functions	L10 (m,1)	L8 (1,)
With anti-jump	Connect	
With interlock		Disconnect
No anti-jump	Disconnect	
No Interlock		Connect

DY：Power module　　Sk：Control module　　Hk：Auxiliary switch of Breaker

Ha：Local closing button　　Xq：Operating coil　　R1-R2：Current-limiting resistance

1C、2C：Capacitance　　Ta：Local opening pushbutton

Diagram for Truck Type

VS1/R-12 indoor high voltage vacuum circuit breaker with lateral operating mechanism

Specification

VS1/R-12 indoor high voltage vacuum circuit breaker with lateral operating mechanism

VSG1-12 indoor high voltage vacuum circuit breaker with lateral operating mechanism used spring to storage energy.The operating mechanism can be operated by two ways:by manual and electromotive operation.The characteristics is accordance with GB1984-2003 High voltage AC circuit breaker,JB3855-1996 3.6-4.5kV indoor AC High voltage circuit breaker and IEC standard 62271-100:2001 high voltage AC circuit breaker.
Following information is required for order

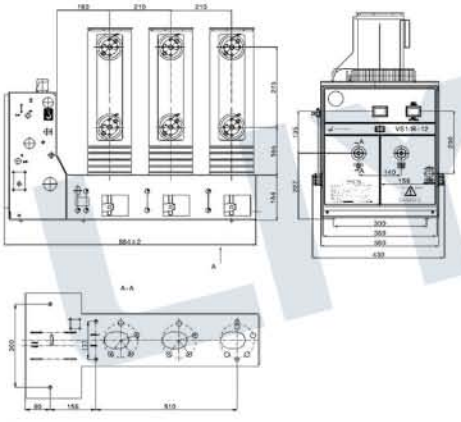
VCB full type,main technical specification,distance between phase and quantity.
Type and specification of service voltage.
Name and quantity of spare parts.

C

Parameters

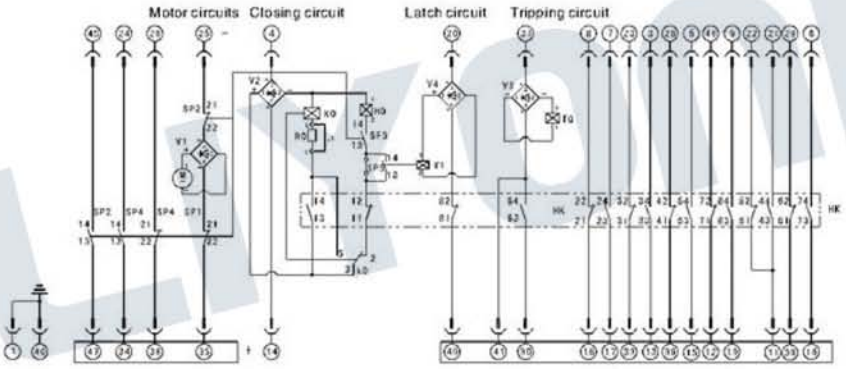
S.N	Name	Unit	Data		
1	Rated voltage	kV	12		
2	Rated power frequency withstand voltage		42		
3	Rated lightning impulse withstand voltage		75		
4	Rated frequency	Hz	50		
5	Rated current	A	630	1250	1600
6	Rated short circuit breaking current	kA	20	20	
			25	25	25
			31.5	31.5	31.5
				40	40
7	Rated peak withstand current	kA	50	50	
			63	63	63
			80	80	80
				100	100
8	Conductive circuit resistance of each phase	μΩ	≤40	≤35	
9	Clearance between open contacts	mm	11±1		
10	Overtravel		3±0.5		
11	Contact bouncing duration at closing opening	ms	≤2		
12	Out of simultaneity of CO operation of three poles		≤2		
13	Opening time		≤50		
14	Closing time		≤100		
15	Average opening speed	m/s	0.9~1.3		
16	Average closing speed		0.4~0.8		
17	D.C component		50%(Max.)		

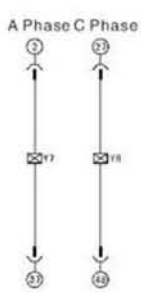
Drawing



Dimensions of Lateral Operating Mechanism(VS1 insulation tube)

Drawing





Optional wiring set

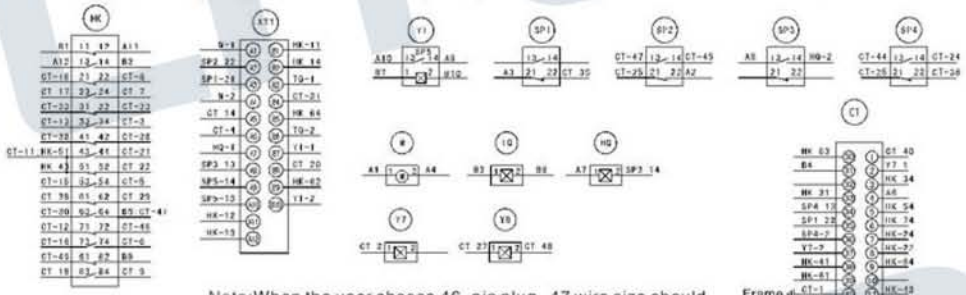
Jumper status / Configuration	Jumper	A9-A10
With anti-jump	With interlock	/
	No interlock	√
No anti-jump	Disconnect HK13,HK14	

Operating power source \ Jumper	m-l L1
AC/DC220V	/
AC/DC110V	√

Note:
1.The status of the switchgear is breaking and without energy storage.
2. When the operational source is D.C.,the polarity within dashed box should be equivalent.
3. When the user choose 46-air plug , 47 wire size should be change 32,48should be 42,and 49 should be 10.

SP5:Limit switch
SP1~SP4:Micro switch(the switch used after closed energy-storing spring)
HK:auxiliary switch(the switch used after division and operation)
V1~V4:Bridge Rectifier(canceled when it's DC) Y1:closing coil
KO:anti-jump relay
Y7~Y8:Indirect overcurrent trip
L1:short jumper
HQ:closing coil
L1:short jumper
HQ:closing coil
TQ:tripping coil
M:storage motor
R0~R1:Resistor divider

Typical wiring diagram of the second principle of fixed type Vacuum Circuit Breaker



Note:When the user choose 46-pin plug , 47 wire size should be change to 32,48should be 42,and 49 should be 10.

Technical requirement:
1. XT1 is circuit board.Both A and B are Connection-style plug-ins,they could insert and pull out.
2. Y1,Y7,Y8,K0 is an optional components，if not choose,the corresponding connection terminal is not connected.
3. The status of the switchgear is breaking and without energy storage,truck is in the position of experimental.
4. Dump circuit and over-current circuit line use the diameter is 1mm,grounding line use the diameter is 2.5mm,and the other control lines use the diameter is 1mm.
5. When CT choose 46-air plug,fixed it above the frame.

Wiring Notes:
1. The jumper with anti-jump and interlock,when the voltage is 110kV,1 and m connected use short jumper.
2. When the jumper with anti-jump but no interlock,A9 and A10 should be connected using short jumper in the position of interlock,when the voltage is 110kV,1 and m connected use short jumper.
3. When the jumper no anti-jump but with interlock,please disconnect HK13,HK14
4. When the jumper no anti-jump and no interlock,A9 and A10 should be connected using short jumper in the position of interlock,and also disconnect HK13,HK14;when the voltage is 110kV,1 and m connected use short jumper.

ZN28-12 (ZN28A-12) Indoor HV Vacuum Circuit Breaker

Summary

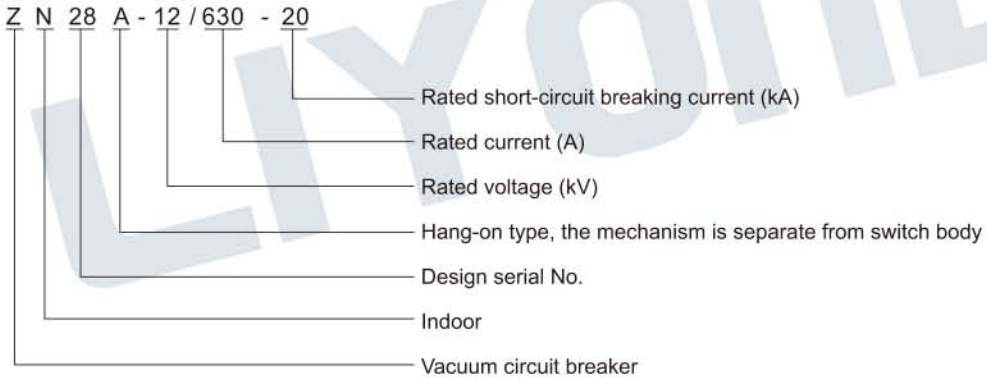
ZN28-12 and ZN28A-12 indoor HV vacuum circuit breaker applies to power system of rated voltage 12kV, three-phase AC 50/60Hz. it used to control and protect electric apparatus in industry like mining, substation and so on. ZN28-12 is a unitary type (operation mechanism is installed inside the switchgear and combine with it as a whole); ZN28A-12 is a hanging-on type (the mechanism and switchgear are separately installed on cubicle or support frame, then connected with link rod and drive shaft.)

As long as the VCB operates within the required mechanical parameter, it can work with many advantages such as strong breaking capability, effective arc-extinction, long lifetime, reliable and safe operation as well as easy maintenance. The product conforms to IEC62271-100, GB/T1984, JB3855 and DL/T403 standards.

Ambient condition

1. Altitude: ≤1000m;
2. Ambient temperature: -25℃~+40℃;
3. Relative humidity: daily average ≤95%, monthly average ≤90%;
4. Earthquake intensity: ≤8 degree;
5. It should work in occasions without flammable and explosive matter, without corrosive chemical and frequent severe vibration.

Model



Product feature

1. The vacuum arcing chamber of this VCB is of middle sealed-in longitudinal magnetic field type. The main shaft, opening spring and buffer are all installed on the framework. There are 6 pieces of insulator switch fixed with stable and moving trestles , then the vacuum arcing chamber are installed between the stable and moving trestles. The main shaft connects with moving conducting bar of vacuum arcing chamber through crutch arm of insulating bar. Two pieces of insulation bars connect two ends of stable and moving trestles to form a whole so as to improve the rigidity.
2. When the stable and moving contact open by the performance of operation mechanism, the arc in vacuum occur between contact, then extinct when the current reach at zero. Due to the special contact structure, during the arcing period, there is longitudinal magnetic field between contact so that arc lies evenly on the surface of contact and maintain a low arc voltage; in Vacuum arc-extinction chamber, the medium intensity recover at high speed, as well as small arc power and electro-corrosion ratio after arc extinction, thus to improve the breaking capability on short-circuit current and electric life.
3. The VCB applies to rigorous occasions such as high altitude and frequent operation.
4. As long as the VCB accord to the mechanical characteristics, the client may select adaptable electromagnet or spring operation mechanism according to special situation.

Technical specification

Parameter on mechanical character

No.	Item	Unit	Data
1	Distance between open contacts	mm	11±1
2	Super travel	mm	4±1
3	Three-phase opening asynchronism	ms	≤2
4	Central distance between phases	mm	210(230, 250, 275)±1
5	Cushion stroke of buffer	mm	10
6	Average opening speed	m/s	0.4~0.8
7	Average closing speed	m/s	0.8~1.3
8	Wearing thickness of moving & fixing contacts	mm	≤3
9	Resistance of each circuit	μΩ	630A≤50; 3150A≤30 1250A,1600A,2000A,2500A≤40
10	Closing trip	ms	≤2

Technical parameter

No.	Item	Unit	Data				
1	Rated short-circuit breaking current	kA	12.5kA	20kA	25kA	31.5kA	40kA
2	Rated voltage	kV	12				
3	Rated current	kA	630	630 1000 1250	1000 1250 1600	1250 1600 2000 2500	1600 2000 2500 3150
4	4s rated short-time withstand current	kA	12.5	20	25	31.5	40
5	Rated short-circuit making current	kA	31.5	50	63	80	100
6	Rated peak withstand current	KA	31.5	50	63	80	100
7	Rated short-circuit breaking time	Times	50	50	50	50	30
8	Mechanical life	Times	20000				
9	Full breaking time	ms	50				
10	Rated operation sequence		O-0.3s-CO-180s-CO		O-180s-CO-180s-CO		
11	1min. PF withstand voltage(virtual value)	kV	42				
12	Lightning impulse withstand voltage(peak)	kV	75				
13	Model of operation mechanism		Follow client's requirement				

C

Outline dimension

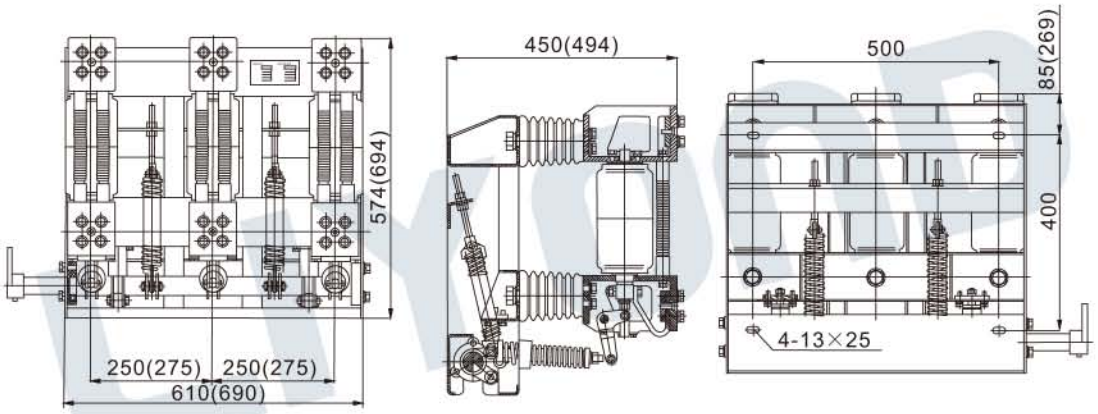
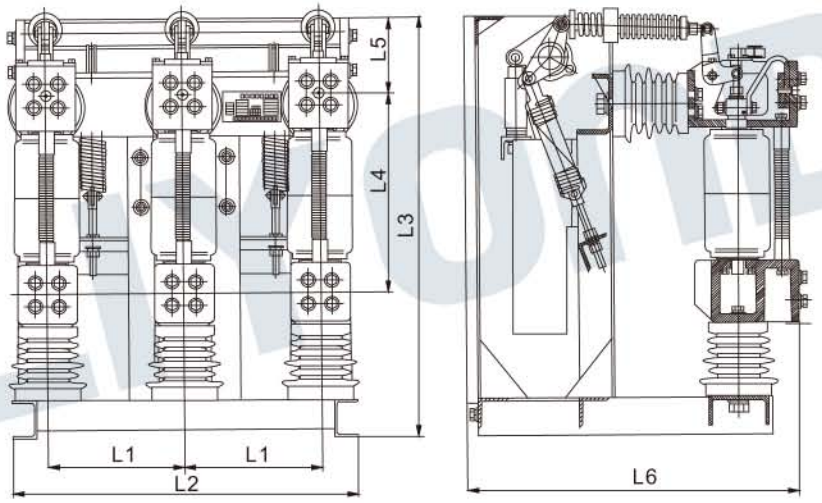


Diagram 1 ZN28A-12 indoor HV vacuum circuit breaker



L1	L2	L3	L4	L5	L6
210	540	710	337	129	543
230	580	710	337	129	543
250	620	710	337	134	543
275	680	757	360	143	578

Diagram 2 ZN28-12 indoor HV vacuum circuit breaker

Model VS1 Indoor High Voltage Vacuum Circuit Breaker Handcart Assembly

Product Overview

Model VS1 series of circuit breaker assembly are mainly used in the rated voltage 12-24KV, the rated short circuit breaking current 20 and 50KA, and the rated current 630-5000A for the power distribution users. The mechanical endurance is 20,000 operating and 50 operating full capacity breaking ability at small current. It is suitable for the application with frequent operation and it features free of maintenance and few service. It could be used with Model KYN28A (GZS1) metal-enclosed switchgear and other fixed cabinet or handcart cabinet.

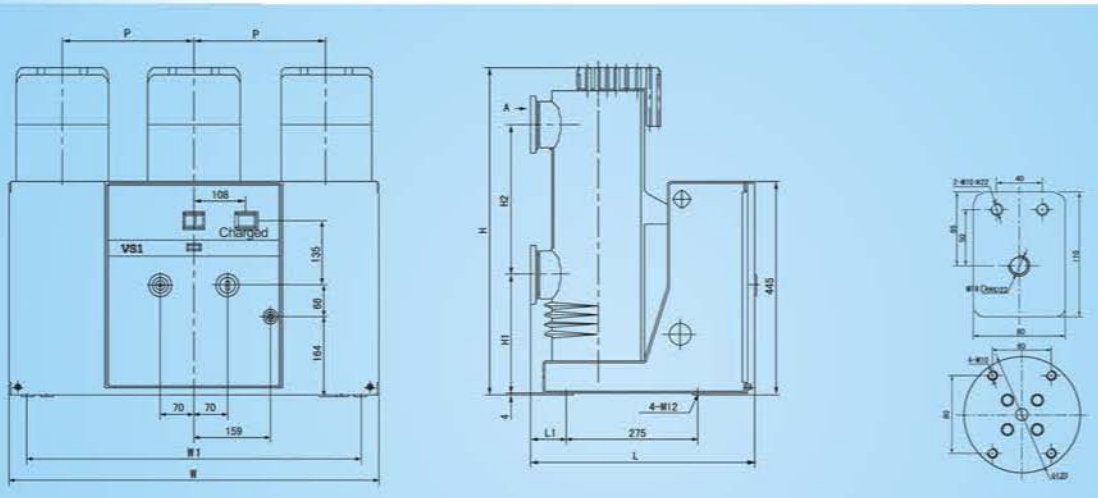
Technical Features

- The first generation of the builtin type handcart in China with independent intellectual rights It features a matured technology and high price/performance ratio.
- The key parts adopt nickel-phosphorus alloy plating with perfect wear resistance and corrosion resistance.
- The key parts are made by ourselves to ensure the products to meet the designing requirement of design.
- The cylindrical composite insulation main circuit features small volume, free of maintenance and few service.

Technical Parameters

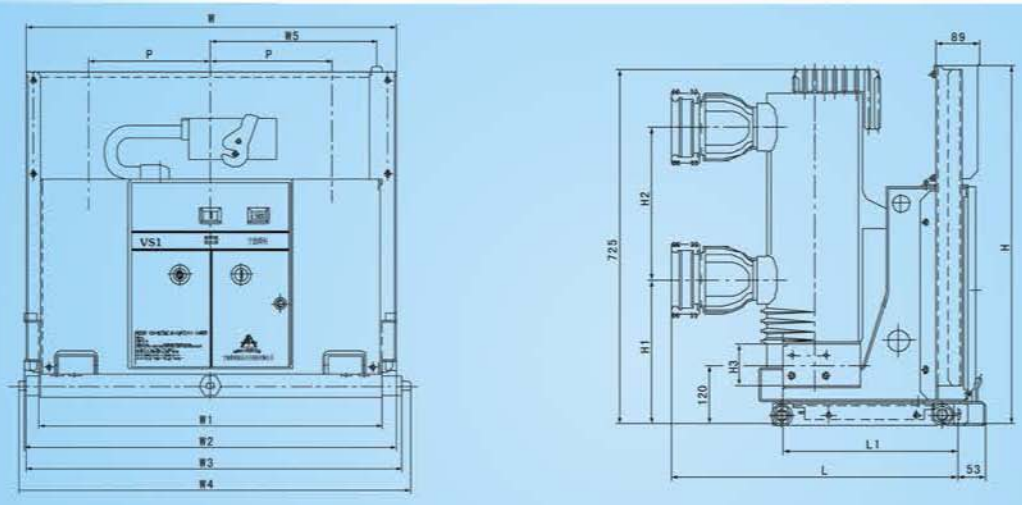
Parameters	Units	Technical Parameters
Control circuit operating voltage	V	AC、DC220/110
Closing and opening electrical magnet power	W	370
Charged motor power	W	70 (40kAis100)
Closing and opening electrical magnet current	A	1.1 (220V) /3.3 (110V)
Over current release working current	A	2.5、3.5、5 (±10%)
Charged time	s	≤15
Closing time	ms	35-70
Opening time	ms	20-50
Auxiliary switch contact logarithm		8K8B(maximun 12K 12B)
Mechanism travel	mm	12kV-15/24kV-16.5

Outline and Installation Dimension Drawing



Parameter		P	W	W1	H	H1	H2	L	L1
rated current (A)	breaking current (KA)	mm	mm	mm	mm	mm	mm	mm	mm
630、1250、1600	20、25、31.5	210	588	520	580	237	275	455	65
1250	40								
1250、1600、2000、	25、31.5、40	275	770	720	632	252	310	465	78
2500、31504000、5000	31.5、40、50								

Operating Mechanism Location Diagram



Parameter		P	W	W1	W2	W3	W4	W5	H	H1	H2	H3	L	L1
rated current (A)	breaking current (KA)	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
630、1250、1600	20、25、31.5	210	638	596	644	652	682	277	640	280	275	78	598	433
1250	40													
1250、1600、2000、	25、31.5、40	275	838	778	840	852	882	377	698	295	310	86	586	361
2500、3150、4000、5000	31.5、40、50													