

Catalogue

Wenzhou Xucky Electric Co.,Ltd

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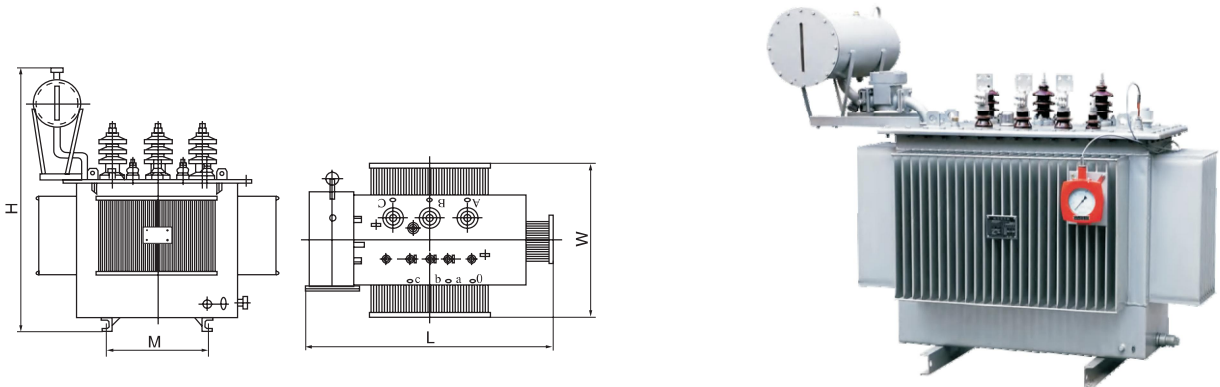
Power Equipment & Transformer & VCB

S9 Series Distribution Transformer

1. Application

This kind of product feature has high efficiency and low consumption. It can save a lot of power consumption and operating costs. The new S9 Series transformer is impoldered on the basis of the 10 kV Distribution transformer. It accords with the GB1094-96,GB/T6451-99,IEC76 standard.

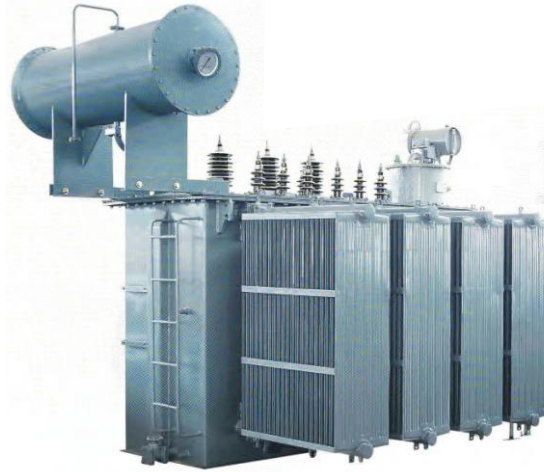
2. Outline and Installation Dimension



3. Technical Specification

Rated Capacity (kVA)	Voltage Schedule			Connecting Group	Consumption(W)		No-load current (%)	Short circuit impedance(%)	Weight (kg)			Outline dimension (mm±10%)			Gauging Distance
	HV	Tapping	LV		N0-load (kW)	load (kW)			Body	oil	Total	Length	Width	Height	
10	6	±5% (±2×2.5%)	0.4	Yyn0, Dyn11	65	330	3.5	4	90	35	150	760	400	950	350 × 350
20					105	480	3.0		135	60	225	885	400	955	350 × 350
30					130	600	2.1		180	70	285	985	380	1015	400 × 400
50					170	870	2.0		230	75	350	985	510	1035	400 × 450
63					200	1040	1.9		285	90	430	1060	465	1135	400 × 450
80					250	1250	1.8		295	95	475	1010	775	1070	400 × 450
100					290	1500	1.6		330	100	520	1010	740	1095	400 × 450
125					340	1800	1.5		380	110	600	1040	770	1135	400 × 550
160					400	2200	1.4		440	120	685	1235	735	1165	550 × 550
200					480	2600	1.6		515	135	800	1280	765	1210	550 × 550
250					560	3050	1.2	610	160	940	1345	800	1315	550 × 550	
315					670	3650	1.1	715	180	1105	1395	850	1375	660 × 660	
400					800	4300	1.0	880	205	1310	1435	820	1460	660 × 660	
500					960	5150	1.0	1005	230	1515	1525	965	1450	660 × 660	
630					1200	6200	0.9	1155	265	1770	1615	1080	1615	660 × 660	
800					1400	7500	0.8	1420	315	2160	1700	1120	1705	820 × 820	
1000					1700	10300	0.7	1580	425	2520	1750	1140	1880	820 × 820	
1250					1950	12000	0.6	1940	495	3040	1850	1245	1835	820 × 820	
1600					2400	14500	0.6	2355	560	3800	1865	1285	2020	820 × 820	
2000					2600	17000	0.5	3165	755	4950	2300	1165	2305	1070 × 1070	
2500	3000	20700	0.5	3880	1300	6580	2440	1315	2490	1070 × 1070					

SZ9 ON-load Tap-changer Power Transformer



1. Application

The SZ9 on-load tap-changer power transformer is widely applies to urban and rural electric network construction. The iron core is in ladder shape and changes the traditional piling way of iron core as well as the inner distribution of magnetic way. It also decrease the no-load consumption, no-load current consumption and noise pollution all by 20%. The new product applies CAD tool and marked with advanced design, reasonable structure, high quality material. It accords with GB1094-1996 and GB/T6451-1999.

2. Technical Specification

Rated Capacity (kVA)	Voltage Schedule			Connecting Group	Consumption(W)		NO-load current (%)	Short circuit impedance(%)	Weight(kg)			Outline dimension (mm±10%)			Gauging Distance
	HV	Tapping	LV		No-load (kW)	load (kW)			Body	oil	Total	Length	Width	Height	
200	6 6.3 10 10.5 11	±4 × 2.5%	0.4	Yyn0, Dyn11	430	3060	1.6	4	610	450	1430	950	950	1600	550 × 550
250					510	3600	1.5		760	500	1700	1100	1100	1640	550 × 550
315					610	4320	1.5		1060	550	2120	1200	1200	1750	660 × 660
400					740	5220	1.4		1100	660	2160	1250	1250	1800	660 × 660
500					870	6210	1.4		1330	700	2850	1300	1300	1950	660 × 660
630					1120	7650	1.3		1850	740	3410	1300	1300	2110	820 × 820
800					1330	9360	1.3	1980	780	3830	1480	1480	2330	820 × 820	
1000					1550	10980	1.3	4.5	2300	1020	4800	1500	1500	2525	820 × 820
1250					1880	13040	1.2	2870	1460	5950	1530	1530	2730	820 × 820	
1600					2400	15570	1.1	3450	1730	6950	1550	1550	3000	820 × 820	

S9-M.R, S11-M-M.R Ribbon-wound Core Oil Complete Transformer

1. Application

This type of transformer adopts high-permeability cool-rolling si-steel piece as iron core. It is processed with big fill factor and there is no spacing inside the magnetic path. The HV and LV coil is continuously wound around the core with good concentricity and compact winding. The product is of low consumption and slight noise pollution by combining new generation of technology good performance and energy saving. It is widely used in power distribution system.



2. Technical Specification

S11-M.R Series three-phase ribbon-wound core oil complete sealed distribution transformer

Capacity (kVA)	Voltage schedule		Connecting group	Consumption		Short-circuit impedance (%)	No load current (%)	Outline dimension mm(± 10%)			Weight(kg) (± 10%)		Gauging distance (mm)				
	HV(kV)	LV(kV)		No load(W)	load(W)			Length	Width	Height	Oil	Total					
30	6	0.4	Dy11 Yyn0	90	600	4	0.6	1020	600	1090	95	370	400 x 550				
50				120	870		0.6	1050	620	1120	110	450	400 x 400				
63				140	1040		0.57	1120	650	1150	120	520	550 x 550				
80				175	1250		0.54	1160	670	1170	130	570	550 x 550				
100				200	1500		0.48	1200	700	1210	150	640	550 x 550				
125				235	1800		0.45	1250	730	1250	170	750	550 x 550				
160				280	2200		0.39	1290	750	1300	200	860	550 x 550				
200				6.3	0.4		Dy11 Yyn0	335	2600	4.5	0.36	1330	780	1345	245	990	550 x 550
250				11				390	3050		0.33	1370	780	1410	270	1230	660 x 660
315				465				3650	0.3		1420	800	1470	290	1380	660 x 660	
400				560				4300	0.3		1460	800	1530	320	1760	660 x 660	
500				670				5100	0.27		1505	805	1590	350	1960	660 x 660	
630				840				6200	0.27		1590	850	1650	400	2400	660 x 660	
800				980				7500	0.27		1655	935	1690	550	2530	820 x 820	
1000				1150				10300	0.27		1755	1035	1750	630	2840	820 x 820	
1250				1360				12800	0.27		1895	1125	1820	710	3300	820 x 820	
1600	1640	14500	0.27	1970		1240		1950	830		3640	820 x 820					

S9-M.R Series three-phase ribbon-wound core oil complete sealed power distribution transformer

Capacity (kVA)	Voltage schedule		Connecting group	Consumption		Short-circuit impedance (%)	No load current (%)	Outline dimension mm(± 10%)			Weight(kg) (± 10%)		Gauging distance (mm)				
	HV(kV)	LV(kV)		No load(W)	load(W)			Length	Width	Height	Oil	Total					
30	6	0.4	Dy11 Yyn0	130	600	4	0.6	1000	590	980	80	320	400 x 400				
50				170	870		0.6	1100	610	1035	90	400	400 x 400				
63				200	1040		0.57	1050	630	1055	100	460	550 x 550				
80				240	1250		0.54	1080	650	1120	110	510	550 x 550				
100				290	1500		0.48	1090	680	1160	120	570	550 x 550				
125				340	1800		0.45	1130	710	1210	130	670	550 x 550				
160				400	2200		0.39	1240	730	1280	160	780	550 x 550				
200				± 2x	0.4		Dy11 Yyn0	480	2600	4.5	0.36	1290	760	1320	175	920	550 x 550
250				2.5%				560	3050		0.33	1320	770	1380	205	1120	660 x 660
315				or				670	3650		0.3	1335	780	1440	235	1250	660 x 660
400				5%				800	4300		0.3	1430	790	1500	285	1500	660 x 660
500				960				5100	0.27		1480	800	1520	330	1750	660 x 660	
630				1200				6200	0.27		1520	830	1580	380	2210	660 x 660	
800				1400				7500	0.27		1620	900	1630	430	2320	660 x 660	
1000				1700				10300	0.27		1680	920	1710	550	2580	660 x 660	
1250				1950				12800	0.27		1740	1060	1790	670	2730	820 x 820	
1600	2400	14500	0.27	1870		1130		1860	780		2910	820 x 820					

S9-35kV Series Transformers

1. Application



The product conforms to the technical parameters and requirements of IEC60076 and China Standard GB1094 & GB/T6451, and a series of significant innovation is applied in aspects of material, design and structure. It has the features of high efficiency and low loss. It can save a lot of operation cost, and the social benefits are very significant. In conclusion, it is a nationally promoted new product and it is deeply favored by customers.

Installation type: indoor/outdoor type

Altitude: $\leq 1000\text{m}$

Installation site: in places without corrosive gases and obvious dusts.

2. Applicable Standards

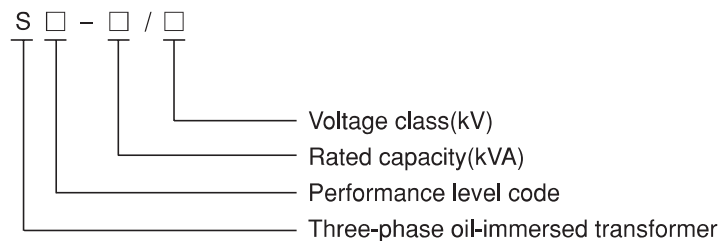
IEC 60076 -1-2-3 2000 Power Transformer

GB1094.1-2-1996 Power Transformer

GB1094.3-5-2003 Power Transformer

GB/T6451-1999 Technical parameters and requirements for three-phase oil-immersed power transformer

3. Model Designation



4. Performance Characteristics

1. The features of this product are high efficiency and low loss. It can save a lot of operation cost, and the social benefits are very significant.
2. The iron cores are made of the imported high-conduction magnetism, cold-roll, and grain-oriented silicon-steel sheets. The iron cores and windings adopt the vacuum drying and vacuum oil-filling processes, which make the internal moisture down to the very low level.
3. The conservator is hermetically sealed, which makes the internal running oil to insulate with oxygen and moisture efficiently.
4. The above features guarantee the transformer does not need to replace the oil during the normal operation, greatly decrease the maintenance cost, and prolong the service life.

5. Main Technical Parameters of S9-M-50~2500/35 Series of Transformers

Rated capacity (kVA)	Voltage combination(kV)			Connect-ing group	No-load lossess (W)	Load-loss (W)(75°C)	Short circuit impedance (%)	No-load current (%)	Weight(kg)			Overall dimension (mm) Lengthxwidthxheight	Gauge (mm)
	High voltage (kV)	Tapping (%)	Low voltage (kV)						Body	Oil	Gross weight		
50	35	± 5	0.4	Yyno	215	1210	6.5	2.00	230	320	650	1150x720x1200	550x550
100					305	2020		1.80	380	400	980	1200x740x1300	550x550
125					340	2380		1.75	440	430	1100	1250x780x1380	550x550
160					360	2830		1.65	510	460	1200	1300x800x1400	660x660
200					430	3300		1.55	600	500	1400	1400x840x1500	660x660
250					510	3950		1.40	690	530	1500	1530x860x1580	660x660
315					610	4750		1.40	800	570	1670	1600x890x1630	660x660
400					735	5750		1.30	930	650	1950	1730x50x1700	660x660
500					870	6900		1.30	1070	710	2300	1800x980x1800	820x820
630					1040	8250		1.25	1300	830	2650	1900x1000x1850	820x820
800					1250	9900		1.05	1600	900	3100	1950x1060x1900	820x820
1000					1480	12150		1.00	1800	1080	3700	1980x1100x1950	820x820
1250					1760	14600		0.90	2100	1150	4000	2010x1160x1980	820x820
1600					2130	17500		0.85	2550	1250	4730	2040x1310x2000	820x820
2000					2500	20680		0.75	3100	1400	5600	2170x1380x2700	1070x1070
2500					2975	24500		0.75	3650	1500	6300	2300x1450x2900	1070x1070

6. Main Technical Parameters of S9-M-800~20000/35 Series of Transformers

Rated capacity (kVA)	Voltage combination(kV)			Connect-ing group	No-load lossess (W)	Load-loss (W)(75°C)	Short circuit impedance (%)	No-load current (%)	Weight(kg)			Overall dimension (mm) Lengthxwidthxheight	Gauge (mm)				
	High voltage (kV)	Tapping (%)	Low voltage (kV)						Body	Oil	Gross weight						
800	35	± 5	3.15 6.3 10.5	Yd11	1250	9900	6.5	1.05	1680	970	3200	2000x1100x1950	820x820				
1000					1480	12150		1.00	1800	1100	3570	2100x1200x2100	820x820				
1250					1760	14650		0.90	2060	1200	4040	2150x1250x2150	820x820				
1600					2130	17500		0.85	2400	1250	4550	2200x1340x2180	820x820				
2000					2600	19350		0.75	2820	1420	5720	2250x1380x2210	1070x1070				
2500					3150	20700		0.75	3330	1550	6000	2300x1400x2300	1070x1070				
3150					35	± 5		3.15 6.3 10.5	Yd11	3860	24300	7.0	0.70	3800	1670	7060	2480x1900x2450
4000	4630	28800	0.70	4500			1830			8200	2800x2250x2500		1070x1070				
5000	5480	33000	0.60	5300			2000			9500	3000x2370x2800		1070x1070				
6300	6570	36900	0.60	6550			2300			11280	3200x2520x2900	1070x1070					
8000	38.5	± 2x2.5	3.15 6.3 10.5	Yd11			9000			40500	7.5	0.55	8150	2700	14000	3300x2700x3200	1475x1475
10000							10600			47700		0.55	9600	3050	16250	3400x2800x3400	1475x820
12500					12600	56700	8	0.50	11000	3660	18800	3500x2930x3500	1475x1070				
16000					15300	69300		0.50	13650	430	22250	3620x3040x3600	1475x1070				
20000	18090	83500	0.50	15500	5530	25000	3700x3100x3700	1475x1475									

ZGS11 Series Combined Transformer

1. Application

ZGS11 Combined transformer is one of the high-tech product developed by our company on the basis of pad-mounted Transformer. Range of capacity:200-1000 kVA . The product is suitable for the neutral-point distribution system or small-resistance earthing system in a 10kV distribution network, or the neutral-point solid grounding system of a three-phase four-wire system in a 400V distribution network, well-integrated, reliable in power supply, compact, light in weight, low noise, etc; It has two types of cable outlet net type and terminal type.

The product can be placed directly into the load center of 10kV network, thus the line loss is reduced and power distribution reliability is increased.



2. Technical Specification

Type	Rated Capacity (kVA)	Voltage Schedule			Vector Group	Consumption(w)		No-load current (%)
		HV(kV)	Tapping	LV(kV)		No-load (kW)	load (kW)	
ZGS9-H(Z)-100/10	100		±5% (±2×2.5%)	0.4	Dyn11	0.29	1.50	1.6
ZGS9-H(Z)-125/10	125					0.34	1.80	1.5
ZGS9-H(Z)-160/10	160					0.40	2.20	1.4
ZGS9-H(Z)-200/10	200					0.48	2.60	1.3
ZGS9-H(Z)-250/10	250					0.56	3.05	1.2
ZGS9-H(Z)-315/10	315					0.67	3.65	1.1
ZGS9-H(Z)-400/10	400					0.80	4.30	1
ZGS9-H(Z)-500/10	500					0.96	5.10	1
ZGS9-H(Z)-630/10	630					1.20	6.20	0.9
ZGS9-H(Z)-800/10	800					1.40	7.50	0.8
ZGS9-H(Z)-1000/10	1000					1.70	10.30	0.7

Dry-Type Power Transformer

1. Application

SC(B) 10 resin-insulated dry-type transformer is designed basing on the Dupont(the USA) NOMEX paper insulation system. the other key components are made from imported materials (such as German MKM copper foil). with advanced manufacturing equipment and technology, the product have high performance, low energy loss, safety and reliability, its especially suitable for high buildings, airports, substations and commercial centers, and any other anti-fire, anti-explode, anti-moisture places etc



2. Specification

Type	Rated current (A)	Voltage combination(kV)		Connection group	No-load current(%)	Loss(W)		Impedance (%)
		HV	LV			No-load	load	
SC10-30	1.73/43.3	6 ± 2.5% 6 ± 5% 10 ± 2.5% 10 ± 5% 10.5 ± 2.5% 10.5 ± 5% 11 ± 2.5% 11 ± 5%	0.4	Dyn11 Yyn0	2.5	190	700	4
SC10-50	2.89/72.2				2.2	270	990	
SC10-80	4.62/115.5				2.1	370	1380	
SC10-100	5.77/144.3				1.9	400	1570	
SC10-125	7.22/180.4				1.7	470	1840	
SC10-160	9.24/230.9				1.7	540	2120	
SC10-200	11.6/288.7				1.5	620	2520	
SC10-250	14.43/360.8				1.5	720	2750	
SC10-315	18.19/454.7				1.3	880	3470	
SC10-400	23.09/577.4				1.3	980	3990	
SC10-500	28.9/721.7				1.3	1160	4880	
SC10-630	36.4/909				1.2	1340	5870	
SC10-630	36.4/909				1.2	1300	5960	
SC10-800	46.2/1154.7				1.2	1520	6950	
SC10-1000	57.7/1443.4				1	1770	8130	
SC10-1250	72.2/1804.3				1	2090	9690	
SC10-1600	92.4/2309	1	2450	11730				
SC10-2000	115.5/2886.7	0.9	3320	14450				
SC10-2500	144.3/3608.4	0.9	4000	17170				

110kV Power Transformer

1. Application



110KV oil immersed on-load regulation power transformer has a series of big changes in material, technical and construction with the characters of small size, light weight, high efficiency with low loss and low noise, stable operation which cutting down large number of loss from energy GRID and minising operation charge, improving the industrial economic benefit, it is used in power plant, transformer substation, big-sized and chemistry factory and etc. the product is according to national and IEC standards.

Installation: outdoor

Ambient temperature: -30°C~+40°C

Altitude: 1000m

Relative humidity: 90%(25C)

2. Specification

Rated capacity (kVA)	Voltage combination and tap range (kV)		Vector group	S9 series		S10 series		No-load current (%)	Short-circuit impedance (%)
	HV	LV		No-load loss	load loss	No-load loss	load loss		
6300	110 ± 2*2.5% 121 ± 2*2.5%	6.3 6.6 10.5 11	Ynd11	9.3	36	8.4	34	0.77	10.5
8000				11.2	45	10.1	43	0.77	
10000				13.2	53	11.9	50	0.72	
12500				15.6	63	14.0	60	0.72	
16000				18.8	77	17.0	73	0.67	
20000				22.0	93	19.8	88	0.67	
25000				26.0	110	23.4	105	0.62	
31500				30.8	133	27.7	126	0.60	
40000				36.8	156	33.1	148	0.56	
50000				44.0	194	39.6	184	0.52	
63000	52.0	234	46.8	222	0.48	12-14			
75000	59.0	278	53.1	264	0.42				
90000	68.0	320	61.2	304	0.38				
120000	84.8	397	76.3	377	0.34				
150000	100.2	472	90.2	448	0.30				
180000	112.5	532	101.3	505	0.25				

ZW8-12 Series High-voltage Vacuum Circuit Breaker



1. Application

ZW8-12 series high-voltage vacuum circuit breaker is a kind of outdoor high-voltage switch equipment with 50Hz three-phase alternating current 12kV rated voltage. It mainly apply to break and close the load current, overload and short-circuit in country power net, city power net and mini-type power system. The general framework of this product adopts the form of three-phase using same box, i.e. put the three-phase arc-extinguishing chamber inside of the metal box. For the SMG material has the advantage of space insulation and grounding insulation, the breaker has perfect performance and high insulation strength.

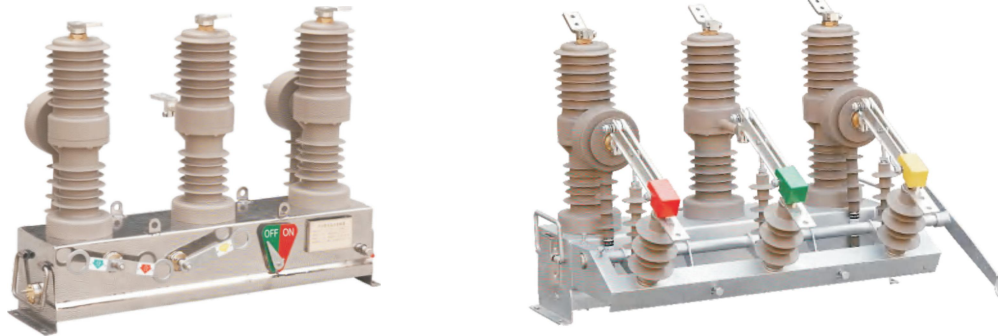
ZW8-12G is made of ZW8-12 circuit breaker and isolating switch, called the combination of circuit breakers, use for disconnect switches and self-prepare power supply. There are built-in PT and outer PT.

This series of operating mechanism for the CT23-type spring operating mechanism energy storage can be divided into two kinds of electric and manual.

2. Technical Parameter

No.	Item	Unit	Data		
			6.3kA	12.5kA	20kA
1	Rated voltage	kV	12		
2	Maximum working voltage	kV	12		
3	Rated current	A	630		
4	Rated short circuit load dropout current	kA	6.3	12.5	20
5	Rated short-circuit making current	kA	16	31.5	50
6	Rated peak withstand current	kA	16	31.5	50
7	Rated short time 1 min tolerance current	kA	6.3	12.5	20
8	Rated insulation level	High-voltage test with working frequency	42		
		Lightning shock pressure	75		
9	Rated operating sequence		Part-0.3S- Joint points -180S- Joint points		
10	Institutions life	time	10000		
11	Rated short open circuit current switch frequency	time	30		
12	Operating mechanism rated switching voltage	V	110,220		
13	Operating mechanism rated points brake current	V	110,220		
14	Contact clearance	mm	11±1		
15	Super stroke (contact spring compression length)	mm	3		
16	Three phase points, closing not synchronism	ms	≤2		
17	Contact switching bounce time	ms	≤2		
18	Average opening speed	m/s	1.0±0.2		
19	Average closing speed	m/s	0.7±0.15		
20	Opening time	The highest operating voltage	0.015-0.05		
		The minimum operating voltage	0.03-0.06		
21	Closing time	s	0.025-0.05		
22	Each phase main loop resistance	μΩ	≤120(≤200)		
23	Action contact allowed to wear accumulative thickness	mm	3		

ZW32-12 Type Outdoor High Voltage Vacuum Circuit Breaker



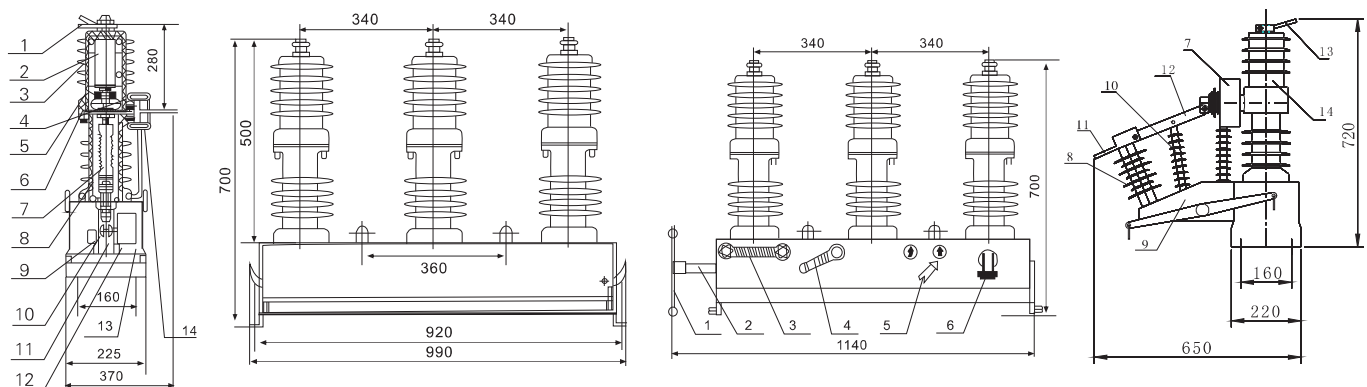
1. Application

ZW32-12 type outdoor high voltage vacuum circuit breaker is 3-phase AC50/60Hz outdoor power distribution equipment with the rated voltage of 12kV. It is mainly used to break and close the load current, over load current, and short circuit current in the electric power system. It fits to be used to protect and control the circuit in substation, mining and industrial enterprises. and the frequently operation places such as the rural power network. It can also be the section switch of power grid, after adding controller, distribution network automation is available.

2. Technical Parameter

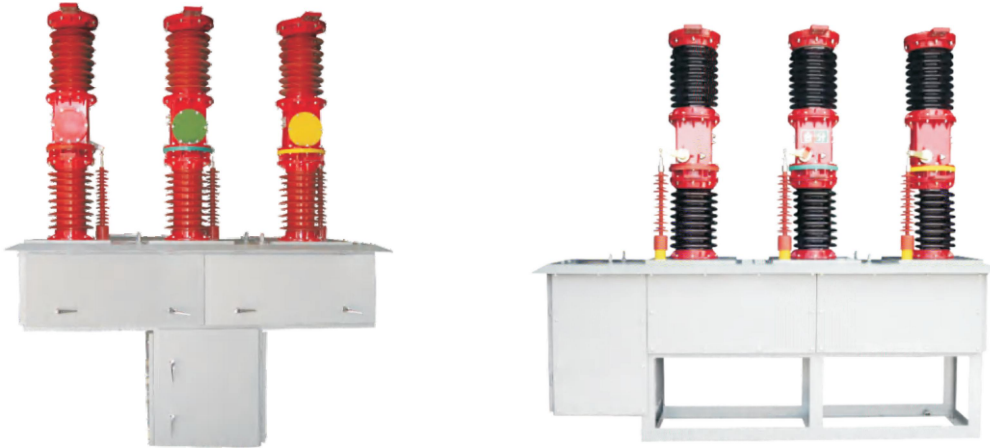
No.	Item	Unit	Value
1	Rated voltage	kV	12
2	Rated frequency	Hz	50
3	Rated current	A	630
4	Rated short-circuit breaking current	kA	20
5	Rated peak withstand current	kA	50
6	Rated short-time withstand current (4 s)	kA	20
7	Rated short circuit close current (peak)	kA	50
8	Mechanical life	times	10000
9	Rated short open circuit current switching frequency	times	30
10	1 min power frequency withstand voltage (wet) (dry) alternate with, on/fracture	kV	42/48
11	Lightning impulse withstand voltage (peak) relative to ground/fracture	kV	75/85
12	Secondary loop 1 min power frequency withstand voltage	kV	2

3. Outline and Installing Dimensions(mm)



- | | | | | | |
|--------------------|----------------------------|-----------------------|--|-------------------------|--|
| 1. the outlet | 2. interrupter | 3. insulation tube | 1. Operating handle | 2. Isolation spindle | 3. manual cut-off circuit breaker handle |
| 4. next outlet | 5. conductive clip | 6. soft link | 4. story energy circuit breaker handle | 5. cut-off instructions | 6. wiring plug |
| 7. insulation rod | 8. contact pressure spring | | 7. CT | 8. insulators | 9. insulation rack |
| 9. tripping spring | 10. driver board | 11. body output shaft | 11. wiring board (inlet side) | 12. isolated blade | 13. wiring board (outlet side) |
| 12. actuator | 13. body box | 14. CT | | | |

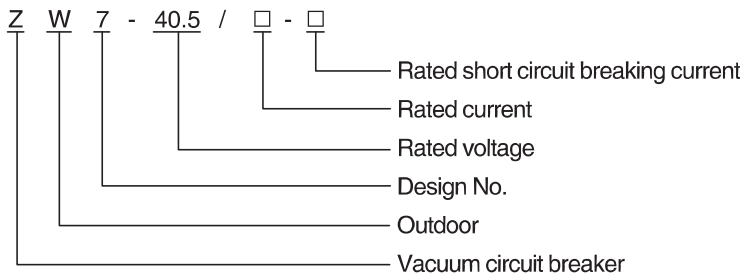
ZW7-40.5 Series Outdoor High Voltage Vacuum Circuit Breaker



1. Application

ZW7-40.5 series outdoor high voltage vacuum circuit breaker is used at three phase AC 50Hz, rated voltage is 40.5kV outdoor high-voltage electrical equipment, attached the spring operator or electromagnetic actuator can be well controlled electric opening and closing can also be Manual storage, manually open and close. Design performance meet GB1984-89 <AC high voltage circuit breakers>; national standards, and meet the IEC-56 <high voltage AC circuit breakers> ; International Electro-technical Commission standards. ZW7-40.5 series vacuum circuit breaker is mainly used for outdoor 35kV power transmission system control and protection also applies to urban and rural power distribution networks and industrial and mining enterprises in the normal operation and short circuit protection purposes. The overall structure of the insulator pillar product type; built vacuum interrupter type on the case, porcelain vase for the next pillar case. For frequent operation place. And has good sealing, anti-aging, high pressure, no burning, no explosion, long life, convenient installation and maintenance features.

2. Type and Meaning



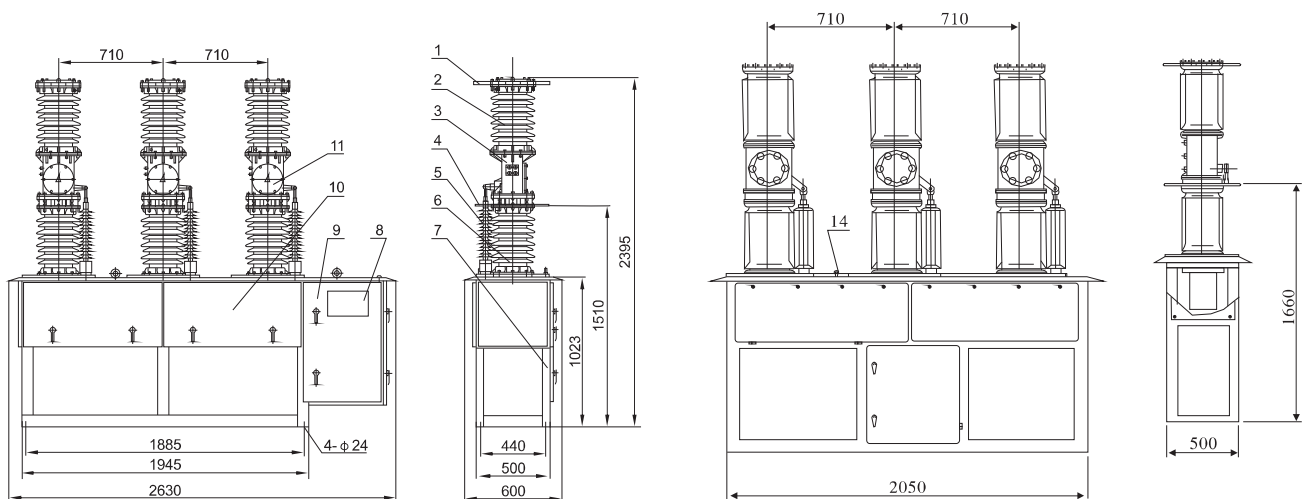
3. Technical Parameter

No.	Item	Unit	Value		
1	Rated voltage	KV	40.5		
2	Rated current	A	1600		
3	Rated frequency	Hz	50		
4	Rated short-circuit breaking current(valid)	kA	20	25	31.5
5	Rated short-circuit making current(peak)	kA	50	63	80
6	Rated peak withstand current	kA	50	63	80
7	4S Rated short time tolerance current	kA	20	25	31.5
8	1 min power frequency withstand voltage(valid)	kV	dry-type:95 (wet-type:80)		
9	Lightning shock pressure(peak)	kV	185		
10	Rated operating sequence		Part-0.3S- Joint points -180S- Joint points		
11	Rated short open circuit current switch frequency	times	20		
12	Operating mechanism rated switching voltage	times	10000		
13	weight	kg	1000		

4. Main Mechanical Parameters

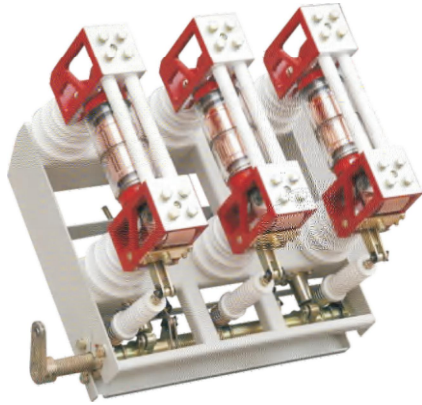
No.	Item	Unit	Value
1	Arcing chamber contact clearance	mm	22±2
2	Arcing chamber Super stroke	mm	5±1
3	Phases center distance	mm	710
4	Arcing chamber Contact switching bounce time	ms	≤5
5	Three phase points, closing not synchronism	ms	≤2
6	Average closing speed	m/s	0.75±0.2
7	Average opening speed	m/s	1.7±0.2
8	Closing time	ms	30~100
9	Opening time	ms	15~60
10	Each phase main loop resistance(without CT)	μΩ	≤100
11	Action contact allowed to wear accumulative thickness	mm	3

5. Outline and Installation Dimension (mm)



- | | |
|---|---------------------------|
| 1. Upper terminal | 7. Chassis |
| 2. Vacuum arcing chamber porcelain sets | 8. Nameplate |
| 3. Holder | 9. CT19BW framework box |
| 4. Under against terminal | 10. CT |
| 5. Insulating tension pole | 11. Hand hole cover board |
| 6. Strut porcelain | |

ZN28(A)-12 Series Vacuum Circuit Breaker



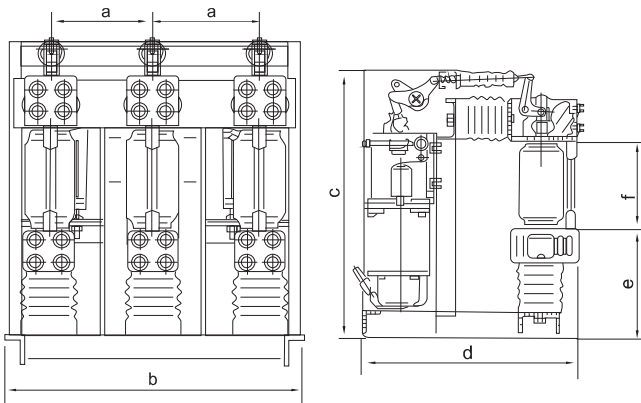
1. Application

ZN28(A)-12 series vacuum circuit breakers are a kind of indoor high voltage switch device which is used in the AC three-phase power system of frequency 50Hz ,rated voltage 12kV. This device is conformed to the standard GB1984-89. This device adopts unibody installation of operating mechanism and circuit breaker technology, which has two styles , respectively, ZN28-12 unibody structure and ZN28(A)-12 separable structure. it is suitable to various fixed switchgears, such as GG1A, XGN2A-10, etc. This products can match with CD17 DC electromagnetic operating mechanism and CT19I, CD19II spring energy storage type operating mechanism.

2. Technical Parameter

Item	Unit	Value			
Rated voltage	kV	12			
Rated current	A	630,1000,1250	1250,1600	1250,1600,2000,2500	1600,2500,3150
Rated short-circuit breaking current	kA	20	25	31.5	40
Rated short-circuit switch off current (virtual value)	kA	50	63	80	100
Rated peak withstand current (peak)	kA	50	63	80	100
Rated thermo stability current(valid)	kA	20	25	31.5	40
Rated thermo stability time	s	4			
Rated operations of short-circuit breaking current interruption	times	30(50)			
Breaking time CD10 magnetic control mechanism	ms	<80			
Rated operation sequence		0.3			
Power frequency withstand voltage (1 min)	kV	42(fracture 48)			
Impulse withstand voltage	kV	75(fracture 85)			
Mechanical life	times	10000			

3. Outline and Installation Dimension (mm)



Data Code	Model	20kA 25kA 31.5kA			40kA
		a	230		
b	600			690	
c	707			842	
d	560			652	
e	293±1			342±1	
f	227±1			227±1	

ZN63(VS1)-12 High Voltage Vacuum Circuit Breaker

1. Application

ZN63(VS1)-12 indoor high voltage vacuum circuit breaker is used in the three-phase AC power system of frequency 50Hz, rated voltage 12kV. It is applied in the grid equipment, the power distribution system of industrial and mining enterprises as well as the places where requires repeated opening short-circuit current and frequent operation.

This circuit breaker adopts unibody design of operating mechanism and circuit breaker technology, which can not only be used as fixed installation unit, but also can constitute the handcart unit with dedicated advanced mechanism.

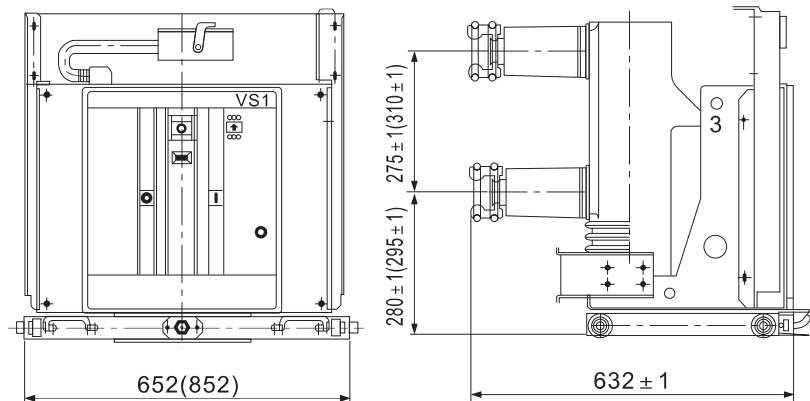
ZN63(VS1)-12 is indoor medium-voltage solid type seal vacuum circuit breaker, ZN63(VS1)-12 vacuum breaker suitable for the insulation in the indoor air switch for 50Hz, rated voltage 12kV and below the grid from the control and protection, ZN63(VS1)-12 vacuum circuit breaker and the frequent need for short-circuit breaking current of occasions with very good performance, fully meet the requirements of automatic re-closing and have higher reliability and service life.

2. Technical Parameter

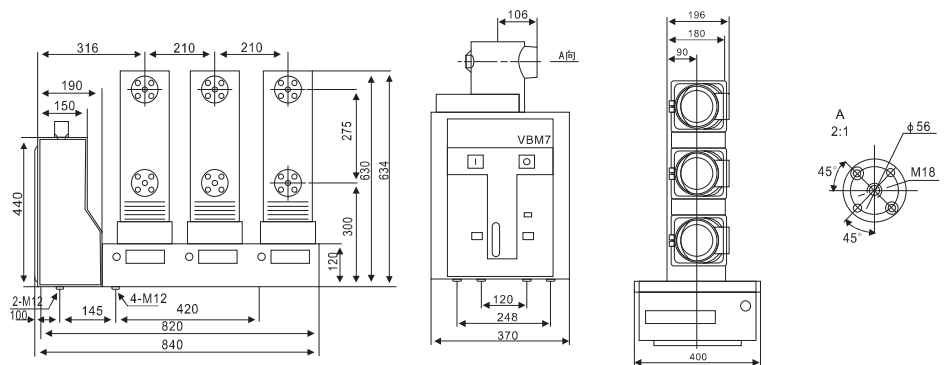
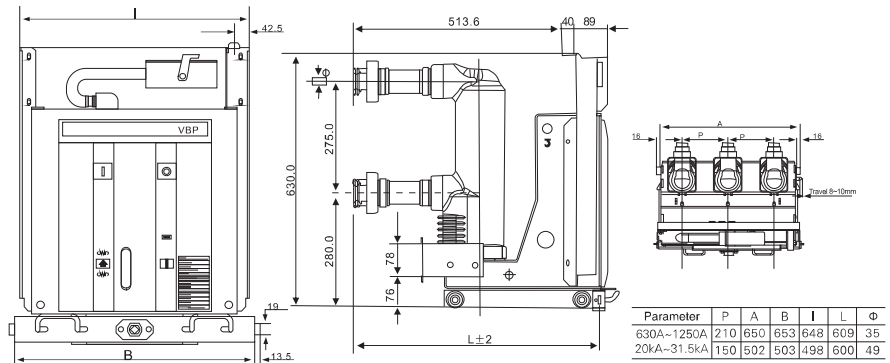
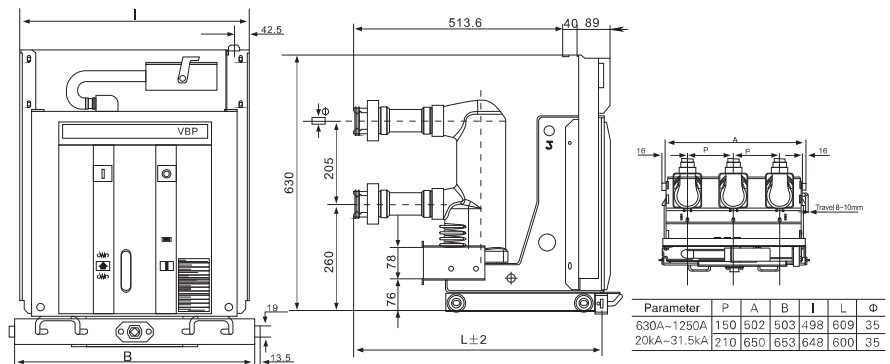
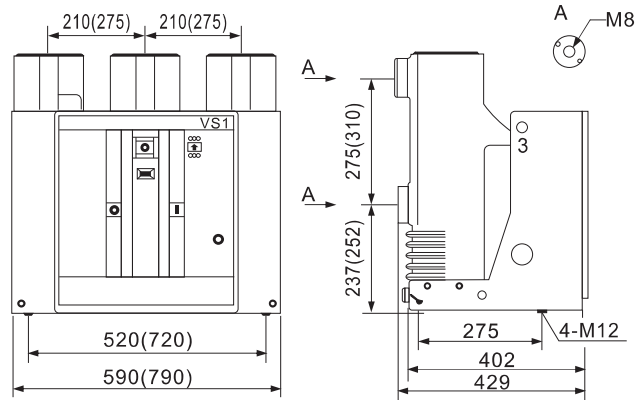
No.	Item	Unit	Value		
1	Rated voltage	kV	12		
2	High test operating voltage	kV	12		
3	Rated current	A	630	630	1250
4	Rated short-circuit breaking current	kA	20	25	31.5
5	Rated short-circuit closing current	kA	50	63	80
6	Rated peak withstand current	kA	50	63	80
7	4Srated short time withstand current	kA	20	25	31.5
8	Rated insulation level	P.F.withstand voltage(Before and after the rated breaking)	kV 42(Fracture48)		
		Impulse withstand voltage(Before and after the rated breaking)	kV 75(Fracture84)		
9	Rated operating order		O-0.3S-CO-180S-CO		
10	Mechanical life	times	3000		
11	Rated short-circuit breaking current breaking times	times	50		
12	Actuator Rated closing voltage(DC)	V	110,220		
13	Actuator Rated opening voltage(DC)	V	110,220		
14	Clearance between opencontacts	mm	11±1		
15	Supper Travel(Compressed length of contact springs)	mm	3.5±0.5		
16	Non corresponding time period between tri-phase opening and closing	ms	≤2		
17	Bounce time of closing contacts	ms	≤2		
18	Average time of opening	s	0.9~0.12		
19	Average time of closing	s	0.4~0.8		
20	Opening time	ms	50		
21	Closing time	ms	100		
22	Main loop resistance of each phase	μΩ	60	50	
23	Allowed acumination thickness between moving contact and static contact	mm	3		

3. Outline and Installation Dimension (mm)

Vacuum circuit breaker with chassis



Vacuum circuit breaker without chassis



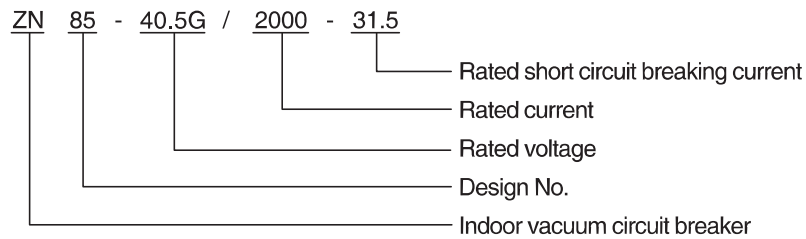
ZN85-40.5G(3AV3) Indoor AC HV Vacuum Circuit Breaker



1. Application

ZN85-40.5G(3AV3) indoor AC HV Vacuum circuit breaker is applicable for power system with three-phase AC50Hz,40.5kV, used for industrial and mining enterprises, power plants and transformer transformer substations to protect and control equipments, also, it can be used in the location where with frequent operating.

2. Type and Meaning



3. Service Environment

Environmental temperature is from:-15~40°C;

Environmental humidity:

Daily average relative humidity ≤ 95%

Monthly average relative humidity ≤ 90%

Earthquake intensity ≤ 8

Keep away from such environment as subject to dust, dirt, smog, corrosive of flammable gas, vapor and salt pollution.

4. Technical Parameter

Item	Unit	Value
Rated voltage	kV	40.5
1 min power frequency withstand voltage (virtual value)	kV	95
Lighting impulse withstand voltage (peak)	kV	185
Rated frequency	Hz	50
Rated current	A	1250,1600,2000
Rated short-time withstand current	kV	25 31.5
Rated peak withstand current	kV	63 80
Rated short circuit duration	S	4
Rated short-circuit breaking current	kA	25 31.5
Rated short-circuit making current	kA	63 80
Rated operating sequence		0-0.3s-CO-180s-CO
Break time	ms	<80
Rated short-circuit breaking current times	times	20
Rated breaking current of capacitor bank	A	630
Rated back-back capacitor bank drop-out current	A	400
Rated operating voltage	V	-110/~110 -220/~220
Mechanical endurance		10000

5. Structure Feature

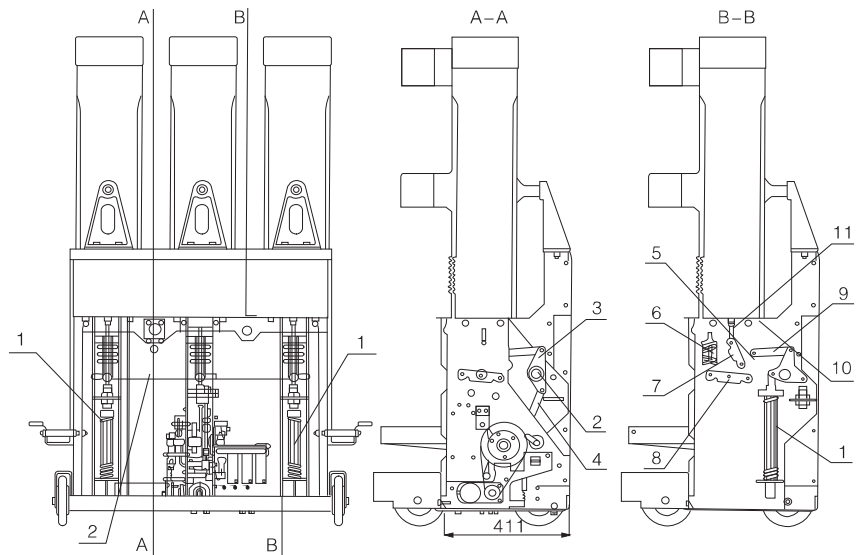
The arc-extinguish chamber is on the upper part and the mechanism is on the lower part. This structure is convenient for debug .

Complex insulating structure using air and organic material; Compactable dimension and small weight.

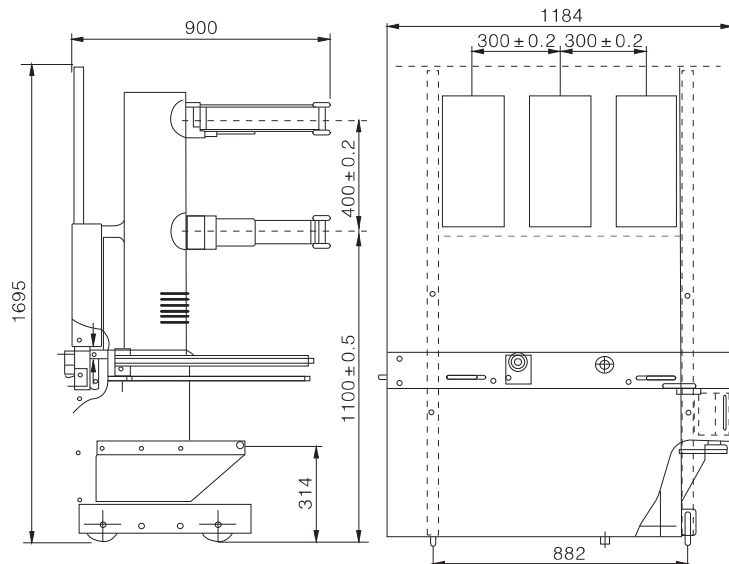
Vacuum arc-extinguish chamber of Cutler-Hammer Company (USA) and domestic ZMD are both applicable for the VCB. Both two kinds of chambers extinguish arc by vertical magnetic field and featuring with low cut-off and good on-off capability with asymmetry.

Simple spring operation mechanism is free from maintenance within 10000 times of operations. Lead-screw propeller, easy and stable operation and good self-locking capability.

6. Outline and Installation Dimension (mm)



- | | | |
|----------------------------|----------------------------|----------------------------|
| 1. Break-brake spring | 2. Large shaft | 3. Middle connecting lever |
| 4. Transmission rod | 5. Drive connecting plate | 6. Contact spring |
| 7. Drive connecting plate3 | 8. Drive connecting plate4 | 9. Drive connecting plate1 |
| 10. Side connecting lever | 11. Rod end joint bearing | |



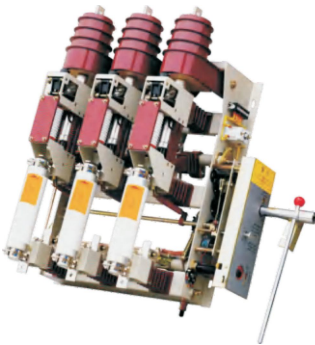
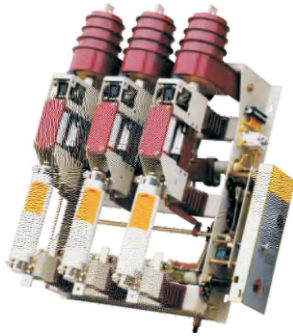
FZ(R)N25-12 Indoor AC High Voltage Vacuum Load Switch

1. Application

FZN25-12D/T630-20 Type Indoor AC switch is three-phase AC 50Hz, rated voltage of 12kV and indoor installations, for industrial and mining enterprises for distribution in clinics and substations and other occasions, as electrical protection and control facilities for the division and load current, loop current, no load transformer and cable charging current.

FZRN25-12D/T200-31.5 type indoor AC high voltage vacuum load switch- fuse combination units is three-phase AC 50Hz, rated voltage of 12kV for indoor installations for industrial and mining enterprises and other occasions to change the station distribution Institution for load control and short circuit protection purposes. Equipped with grounding switch can withstand short-circuit current. Actuator can be manual and electric, easy remote control three power system requirements.

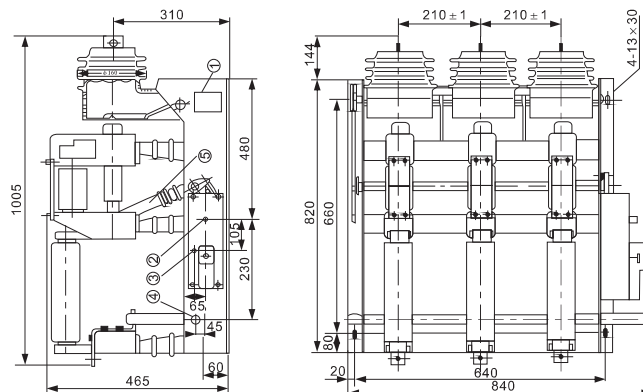
FZN25-12D, FZRN25-12D-type load switch and the combination of electric three-phase are for city distribution and industrial power equipment of three phase ring network or terminal power supply ,for load control and short circuit protection. As the combination of electrical transformers and other electrical equipment on the protective effect than the circuit more reliable, more economical, especially for rings, double radiation power supply units and box-type substation.



2. Technical Parameter

No.	Item	Unit	Value	
			FZN25-12D/T630-20	FZN25-12D/T125-31.5
1	Rated voltage	kV	12	
2	Rated frequency	Hz	50	
3	Rated current	A	630	125
4	Rated insulation level	1min power frequency withstand voltage (effective value)	Arc-quenching chamber fracture 30	
		Lightning impulse withstand voltage (peak)	Earth ,phase 42, insulating fracture 48	
			Earth ,phase 75, insulating fracture 85	
5	Rated dynamic current (peak)	kA	50	-
6	4S thermal current	kA	20	-
7	Rated power load breaking current	A	630	125
8	Rated closed-loop breaking current	A	630	125
9	Rated cable charge breaking current	A	10	10
10	Rated breaking no-load transformer capacity	kVA	1600	1600
11	Rated open circuit breaking current	KA	-	31.5
12	Rated transfer current	A	-	2000
13	Fuse model		-	SDLAJ-12, SFLAJ-12
14	Striker output energy	J	-	2-5
15	Rated short-circuit closed current	kA	50	
16	Earth switch rated dynamic current	kA	50	
17	Earth switch 2s thermal current	kA	20	
18	Auxiliary circuit rated voltage	V	AC DC220	AC DC110
19	Mechanical life	times	10000	

3. Outline and Installation Dimension (mm)



- 1.nameplate
- 2.Energy storage shaft
- 3.trip
- 4.Grounding knife shaft
5. Operating lever

FKN12-12(R) Air High Voltage Load Break Switch With Fuse

1. Application

FKN12-12D/630-20 air high voltage load break switch with fuse is a three phase high voltage switch equipment of 12kv,50hz for breaking or closing load current, loop closed current. no-load transformer and cable charging electric current, close short circuit current. The load switch with earthing switch can bear short-circuit current.

FKN12-12RD/125-31.5 air high voltage load break switch-- fuse-combination unit is made of FKN2-12D load switch and S□LAJ-12(XRNT□-12) H.V current-limiting fuse box. It can be a reliable short-circuit breaking current up to any current: breaking work load switch current, fuse short-circuit breaking current breaking joint working between the current and the full short-circuit current in any over-current, while fuse allows, through its impact load switch sub-gate.

2. Using Condition

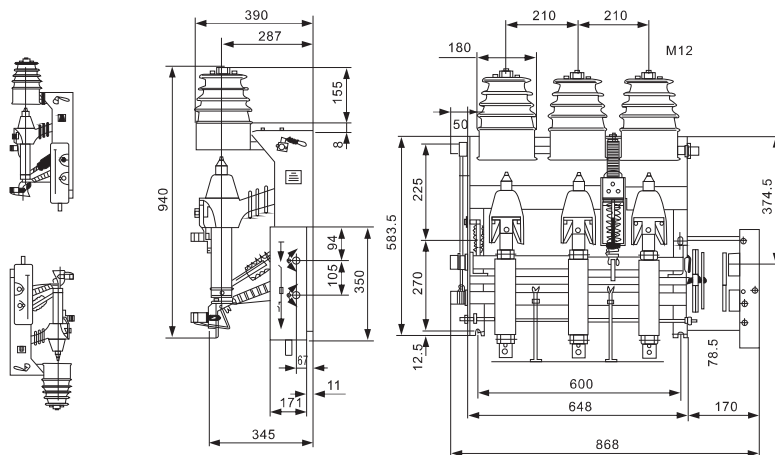
- a. Ambient temperature -25°C~+40°C
- b. Elevation ≤ 1000m
- c. Humidity: daily average humidity ≤ 95%, monthly ≤ 90%
- d. No risk of fire, explosion, serious pollution, chemical corrosion and severe vibration
- e. Pollution degree: II

If use out of above condition, please contact with the manufacture

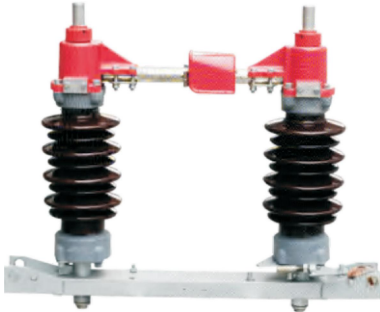
3. Technical Parameter

No.	Item	Unit	FKN-12D/630-20	FZN-12R.D/125-31.5
1	Rated voltage	kV		12
2	Rated frequency	Hz		50
3	Rated amper	A	630	125
4	Thunder voltage	kV		Isolation:85
5	1min Voltage	kV		Earthing 42, Isolation:48
6	Amper	kA		20(4S)
7	Stable current	kA		50
8	Current	kA	50	-
9	Breaking current	kA	-	31.5
10	Moving current	kA	-	1.5
11	Breaking amper	kA		1.8
12	Transformer capacity	kVA		1250
13	Power charge current	A		10
14	Breaking times	times		>100
15	Breaking time	S		>0.06
16	Current	kA	20(2S)	20(2S)
17	Earthing switch voltage	kA	50	50
18	Motor voltage	V		AC220, DC48

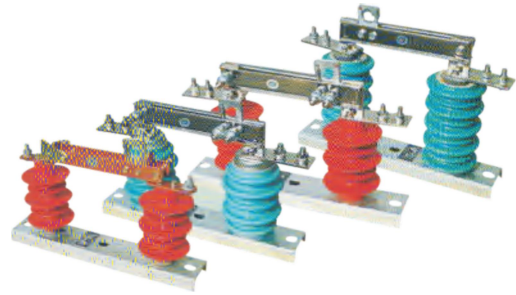
4. Outline and Installation Dimension (mm)



GW Series Outdoor High Voltage Disconnecting Switch

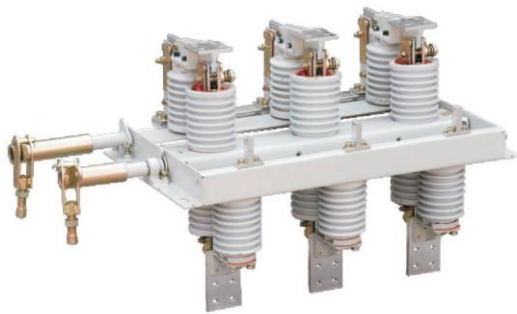


GW4-40.5KV perfect COMPLETE
Outdoor High voltage Disconnecting Switch

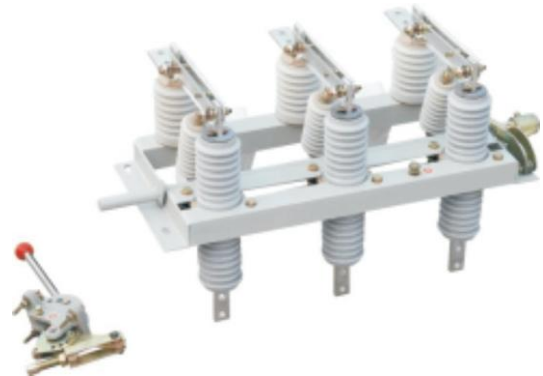


(H)GW9-12 series
outdoor High Voltage Disconnecting Switch

GN Series Indoor Type High Voltage Isolator Switch

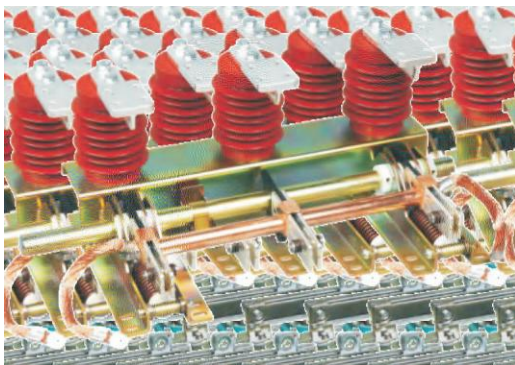


GN30-12 series
Indoor Rotary High Voltage Disconnecting Switch

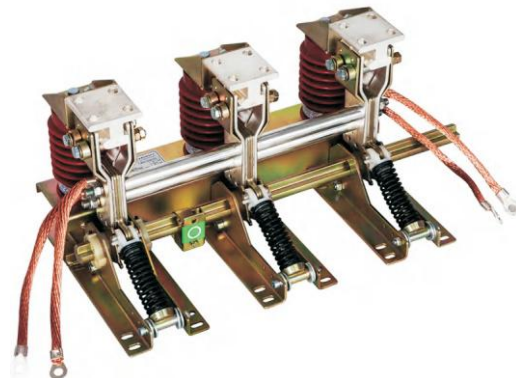


GN19-12 series
Indoor High Voltage Disconnecting Switch

JN Series Indoor High Voltage Ground Switch



JN15-12/31.5 series
indoor High Voltage ground switch



JN15-12/40 series
indoor High Voltage ground switch

