

Catalogue

Wenzhou Xucky Electric Co.,Ltd www.xucky.com



Power Equipment & Transformer & VCB

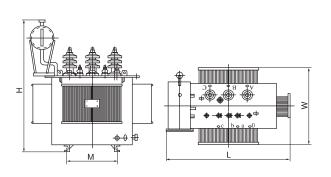


S9 Series Distribution Transformer

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	Volta	age Sche	dule	Connecting	Consum	otion(W)	No-load	Short circuit	We	ight(I	(g)		ne dime nm±109		Gauging
Capacity (kVA)	HV	Tapping	LV	Group	N0-load (kW)	load (kW)	current (%)	imped- ance(%)	Body	oil	Total	Length	Width	Height	Distance
10					65	330	3.5		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	4	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	6				400	2200	1.4		440	120	685	1235	735	1165	550 × 550
200	6.3	±5%		Yyn0,	480	2600	1.6		515	135	800	1280	765	1210	550 × 550
250	10		0.4	, ,	560	3050	1.2		610	160	940	1345	800	1315	550 × 550
315	10.5	(±2×2.5%)		Dyn11	670	3650	1.1		715	180	1105	1395	850	1375	660 × 660
400	11				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	4.5	1580	425	2520	1750	1140	1880	820 × 820
1250					1950	12000	0.6		1940	495	3040	1850	1245	1835	820 × 820
1600	1				2400	14500	0.6		2355	560	3800	1865	1285	2020	820 × 820
2000					2600	17000	0.5	5	3165	755	4950	2300	1165	2305	1070 × 1070
2500					3000	20700	0.5	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	Volta	age Sche	dule	Connecting	Consum	ption(W)	N0-load current	Short	We	eight(I	kg)		ne dime		Gauging
(kVA)	HV	Tapping	LV	Group	No-load (kW)	load (kW)	(%)	imped- ance(%)	Body	oil	Total	Length	Width	Height	Distance
200					430	3060	1.6		610	450	1430	950	950	1600	550 × 550
250					510	3600	1.5	4	760	500	1700	1100	1100	1640	550 × 550
315	6				610	4320	1.5	-	1060	550	2120	1200	1200	1750	660 × 660
400	6.3	±4			740	5220	1.4		1100	660	2160	1250	1250	1800	660 × 660
500	10	×	0.4	Yyn0,	870	6210	1.4		1330	700	2850	1300	1300	1950	660 × 660
630	10.5	2.5%		Dyn11	1120	7650	1.3		1850	740	3410	1300	1300	2110	820 × 820
800	11				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-permedibility cool-rolling si-steel piece as iron core. It is processed with big fill factor and there is no spacing inside the mangnetic path. The HV and LV coil is continuously winded around the core with good concentricity and compact winding. The product is of low consumption and slight noise pollution by combining new generation of technolgy 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	Voltage	schedule	Connecting	Consun	nntion	Short-circuit	No load		Outline		Weig	nt(kg)	Gauging
	voitage	scriedule		Consun	ιριιστι	impedance	current	dimensi	on mm(± 10%)	(± 1	10%)	distance
(kVA)	HV(kV)	LV(kV)	group	No load(W)	load(W)	(%)	(%)	Length	Width	Height	Oil	Total	(mm)
30				90	600		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	6		Dv44	280	2200	4	0.39	1290	750	1300	200	860	550 x 550
200	6.3	0.4	Dy11	335	2600		0.36	1330	780	1345	245	990	550 x 550
250	11		Yyn0	390	3050	4.5	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

Conneitu	Voltago	oobodulo.	Connecting	Canaun	antion	Short-circuit	No load		Outline		Weig	ht(kg)	Gauging
Capacity	voltage	schedule		Consun	iption	impedance	current	dimensi	on mm(± 10%)	(± -	10%)	distance
(kVA)	HV(kV)	LV(kV)	group	No load(W)	load(W)	(%)	(%)	Length	Width	Height	Oil	Total	(mm)
30				130	600		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	6			290	1500		0.48	1090	680	1160	120	570	550 x 550
125	6.3			340	1800		0.45	1130	710	1210	130	670	550 x 550
160	11		Dodd	400	2200	4	0.39	1240	730	1280	160	780	550 x 550
200	± 2x	0.4	Dy11	480	2600		0.36	1290	760	1320	175	920	550 x 550
250	2.5%		Yyn0	560	3050	4.5	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









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:≤ 1000m

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

2. Applicable Standards

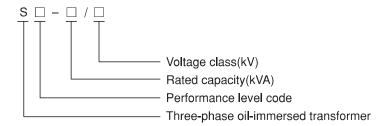
IEC 60076 -1-2-3 2000 Power Transformer

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 make the internal running oil to insolate with oxygen and moisture efficiently.
- 4. The above features guarantee the transformer does not need do 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

Detect	Voltage	combina	tion(kV)		No lood		Chart sinouit	No lood	۱۸/	olabt/k	·~/	Overal dimension	
Rated	High	Tannina	Low	Connect-	No-load	Load-loss	Short circuit		VV	eight(k	.g)	(mm)	Gauge
capacity	voltage	Tapping	voltage	ing group	lossess	(W)(75°C)		current	Daraba	0:1	Gross	I am adh so dalah sebabah adalah	(mm)
(kVA)	(kV)	(%)	(kV)		(W)		(%)	(%)	Body	Oil	weight	Lengthxwidthxheight	
50					215	1210		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	35	± 5	0.4	Yyno	735	5750	6.5	1.30	930	650	1950	1730x50x1700	660x660
500		5	0.4	1 9110	870	6900	0.0	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

Datad	Voltage	combina	tion(kV)		No lood		Chart sinsuit	Na land	۱۸/	oiabt/k	~\	Overal dimension	
Rated	High	Topping	Low	Connect-	No-load	Load-loss	Short circuit		VV	eight(k	.g)	(mm)	Gauge
capacity (kVA)	voltage (kV)	Tapping (%)	voltage (kV)	ing group	lossess (W)	(W)(75°C)	impedance (%)	current (%)	Body	Oil	Gross weight	Lengthxwidthxheight	(mm)
800					1250	9900		1.05	1680	970	3200	2000x1100x1950	820x820
1000			3.15		1480	12150		1.00	1800	1100	3570	2100x1200x2100	820x820
1250	35	± 5	6.3		1760	14650	6.5	0.90	2060	1200	4040	2150x1250x2150	820x820
1600		1 3	10.5		2130	17500	0.5	0.85	2400	1250	4550	2200x1340x2180	820x820
2000			10.5		2600	19350		0.75	2820	1420	5720	2250x1380x2210	1070x1070
2500					3150	20700		0.75	3330	1550	6000	2300x1400x2300	1070x1070
3150			0.15		3860	24300		0.70	3800	1670	7060	2480x1900x2450	1070x1070
4000			3.15	Yd11	4630	28800	7.0	0.70	4500	1830	8200	2800x2250x2500	1070x1070
5000		± 5	6.3		5480	33000		0.60	5300	2000	9500	3000x2370x2800	1070x1070
6300	35		10.5		6570	36900		0.60	6550	2300	11280	3200x2520x2900	1070x1070
8000	38.5				9000	40500	7.5	0.55	8150	2700	14000	3300x2700x3200	1475x1475
10000			3.15		10600	47700		0.55	9600	3050	16250	3400x2800x3400	1475x820
12500		± 2x2.5	6.3		12600	56700		0.50	11000	3660	18800	3500x2930x3500	1475x1070
16000			10.5		15300	69300	8	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 bad-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 10 kV 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 10 kV network, thus the line loss in reduced and power distribution reliability in increased.



2. Technical Specification

T	Rated	Vo	Itage Sched	ule	Vector	Consum	ption(w)	No-load
Type	Capacity (kVA)	HV(kV)	Tapping	LV(kV)	Group	No-load (kW)	load (kW)	current (%)
ZGS9-H(Z)-100/10	100					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		±5%			0.56	3.05	1.2
ZGS9-H(Z)-315/10	315		(±2×2.5%)	0.4	Dyn11	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	Voltage combination(kV)	Connection	No-load	Loss	(W)	Impe- dance
	(A)	HV	LV	group	current(%)	No-load	load	(%)
SC10-30	1.73/43.3				2.5	190	700	
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	6 ± 2.5% 6 ± 5%			1.5	620	2520	
SC10-250	14.43/360.8	10 ± 2.5%			1.5	720	2750	4
SC10-315	18.19/454.7	10 ± 5% 10.5 ± 2.5%	0.4	Dyn11 Yyn0	1.3	880	3470	
SC10-400	23.09/577.4	10.5 ± 5%			1.3	980	3990	
SC10-500	28.9/721.7	11 ± 2.5% 11 ± 5%			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	6
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 seires 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	Voltage combi and tap rar (kV)		Vector group	S9 se	ries	S10 se	ries	No-load current	Short- circuit inpedance
(kVA)	HV	LV	group	No-load loss	load loss	No-load loss	load loss	(%)	(%)
6300				9.3	36	8.4	34	0.77	
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		6.3		18.8	77	17.0	73	0.67	
20000	110 ± 2*2.5% 121 ± 2*2.5%	6.6 10.5	Ynd11	22.0	93	19.8	88	0.67	10.5
25000	121 2 2 210 / 0	11		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	
75000				59.0	278	53.1	264	0.42	
90000		13.8		68.0	320	61.2	304	0.38	
120000		15.75 18		84.8	397	76.3	377	0.34	12-14
150000		20		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

NIa	là a ma			Lled		Data			
No.	Item			Unit	6.3kA	12.5kA	20kA		
1	Rated voltage			kV		12			
2	Maximum working	volta	ge	kV		12			
3	Rated current			А		630			
4	Rated short circuit	load	dropout current	kA	6.3	12.5	20		
5	Rated short-circuit	mak	ing current	kA	16	31.5	50		
6	Rated peak withst	and c	urrent	kA	16	31.5	50		
7	Rated short time 1	min	olerance current	kA	6.3	12.5	20		
8	Rated insulation Is	vol	High-voltage test with working frequency	kV		42			
0	nateu irisulation ie	Rated insulation level Lightning shock pressure				75			
9	Rated operating s	eque	nce		Part-0.3	S- Joint points -180S- Joi	nt points		
10	Institutions life			time		10000			
11	Rated short open	circui	t current switch frequency	time		30			
12	Operating mechar	ism ı	ated switching voltage	V		110,220			
13	Operating mechar	ism ı	ated points brake current	V		110,220			
14	Contact clearance			mm		11±1			
15	Super stroke (con	act s	pring compression length)	mm		3			
16	Three phase point	s, clo	sing not synchronism	ms		≤2			
17	Contact switching	boun	ce time	ms		≤2			
18	Average opening	speed	1	m/s		1.0±0.2			
19	Average closing speed			m/s					
20	Opening time The highest operating voltage				0.015-0.05				
20	Opening time The minimum operating voltage			s	0.03-0.06				
21	1 Closing time			S	0.025-0.05				
22	Each phase main loop resistance			μΩ	ıΩ ≤120(≤200)				
23	Action contact allowed to wear accumulative thickness					3			



ZW32-12 Type Outdoor High Voltage Vacuum Circuit Breaker





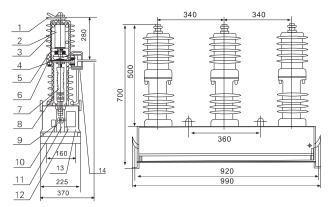
1. Application

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	А	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 4. next outlet 2. interrupter

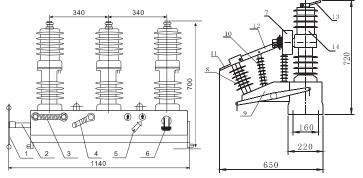
3. insulation tube 6. soft link

5. conductive clip 8. contact pressure spring 7. insulation rod

9. tripping spring 12. actuator

10. driver board 11. body output shaft

13. body box 14. CT



4. story energy circuit breaker handle

1. Operating handle 2. Isolation spindle 3. manual cut-off circuit breaker handle 6. wring plug 5. cut-off instructions

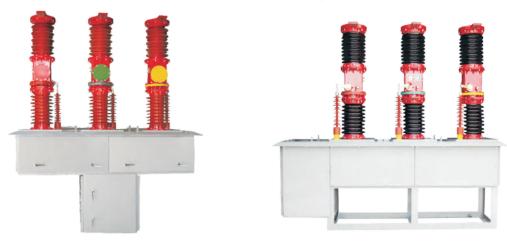
7. CT 8. insulators 11. wring board(inlet side)

9. insolation rack 10. insulation rod 12. isolated blade 13. wring board(outlet side)

14. circuit breaker



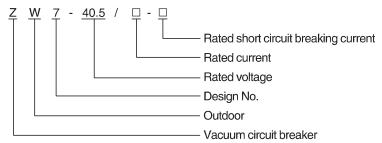
ZW7-40.5 Series Outdoor High Voltage Vacuum Circuit Breaker



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 Manaul 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



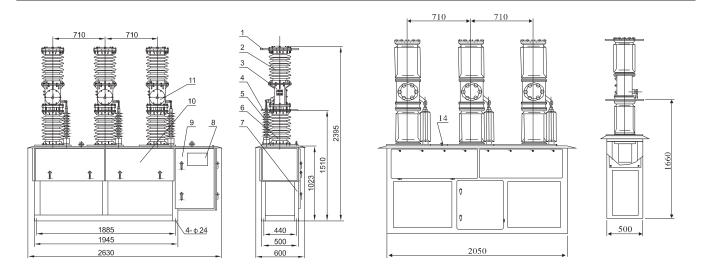
3. Technical Parameter

No.	Item	Unit		Value			
1	Rated voltage	KV		40.5			
2	Rated current	Α		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	es 20				
12	Operating mechanism rated switching voltage	times	es 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



- 1. Upper terminal
- 2. Vacuum arcing chamber porcelain sets
- 3. Holder
- 4. Under against terminal
- 5. Insulating tension pole
- 6. Strut porcelain

- 7. Chassis
- 8. Nameplate
- 9. CT19BW framework box
- 10. CT
- 11. Hand hole cover board



ZN28(A)-12 Series Vacuum Circuit Breaker





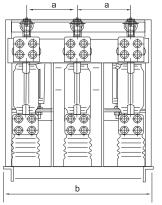
1. Application

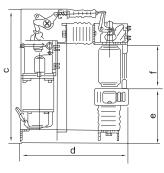
ZN28(A)-12 series vacuum circuit breakers are a kind of indoor high voltage switch device which is used in the AC three-phase power system of frequency 50Hz, rated voltage 12kV. This device is conformed to the standard GB1984-89. This device adopts unibody installation of operating mechanism and circuit 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

2. Technical Parameter

operating mechanism.

Item	Unit	Value			
Rated voltage	kV	12			
Rated current	Α	630,1000,1250 1250,1600 1250,1600,2000,2500 1600,25			
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			





Data Model Code	20kA 25kA 31.5kA	40kA
а	230	275±1
b	600	690
С	707	842
d	560	652
е	293∜	342⁺⁵
f	227±1	227±1







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.





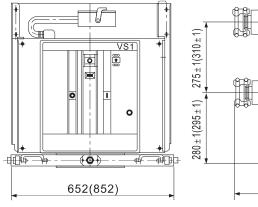
No.	Item	Unit		Value	
1	ated voltage kV 12				
2	High test operating voltage	kV		12	
3	Rated current	Α	630	630	1250
4	Rated short-circuit breaking current	kA	20	25	31.5
5	Rated short-circuit closing current	kA	50	63	80
6	Rated peak withstand current	kA	50	63	80
_ 7	4Srated short time withstand current	kA	20	25	31.5
8	Rated insulation P.F.withstand voltage(Before and after the rated breaking) Impulse witstand voltage(Before and after the rated breaking)		42(Fracture48)		
			75(Fracture84)		
9	Rated operating order		O-0.3S-CO-180S-CO		
10	Mechanical life	times	3000		
_11	Rated short-circult 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		0.4~0.8		
20	Opening time ms 50				
21	Closing time ms 100		100		
22	Main loop resistance of each phase	μΩ	60		50
23	Allowed acumination thickness between moving contact and static contact mm 3				

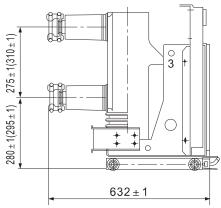


3. Outline and Installation Dimension (mm)

Vacuum circuit breaker with chassis

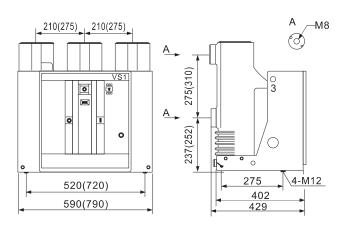


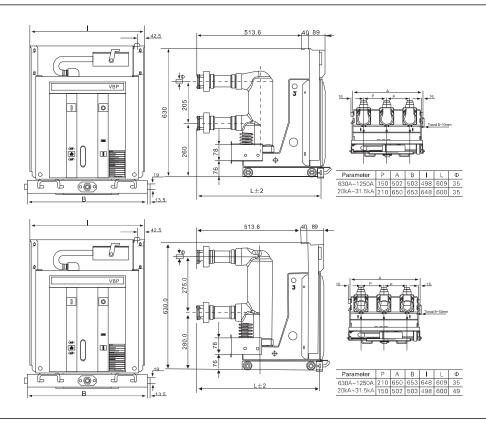


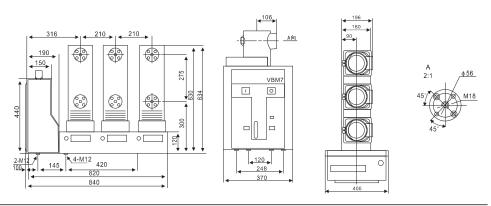




Vacuum circuit breaker without chassis













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 equipemnts, 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 \leq 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	Α	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	Α	630
Rated back-back capacitor bank drop-out current	Α	400
Rated operating voltage	V	-110/~110 -220/~220
Mechanical endurance		10000



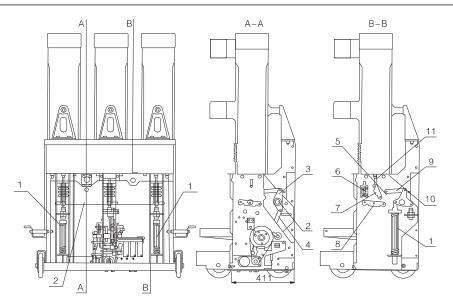
5. Structrue Feature

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

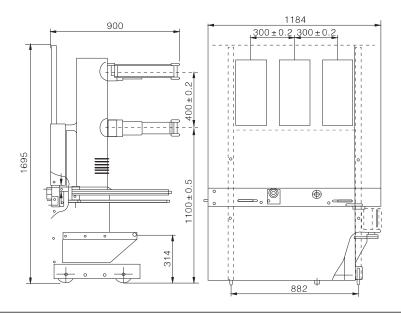
Complex insulating structure using air and organic material; Compactable dimension and small weight.

Vacuum arc-extinguish chamber of Cutler-Hammer Company (USA) and domestic ZMD are both appli cable 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.



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









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.

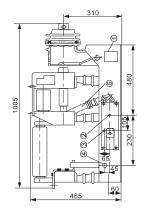
FZRN25-12D/T200-31.5 type indoor AC high voltage vacuum load switch- fuse combination units is three-phase AC 50Hz, rated voltage of 12kV for indoor installations for industrial and mining enterprises and other occasions to change the station distribution Institution for load control and short circuit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

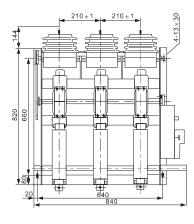
FZN25-12D, FZRN25-12D-type load switch and the combination of electric three-phase are for city distribution and industrial power equipment of three phase ring network or terminal power supply ,for load control and short circuit protection. As the combination of electrical transformers and other electrical 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

2 Rated 3 Rated 4 Rated insulat	voltage frequenc current ion level	ttem y Imin power frequency withstand voltage (effective value) Lightning impulse withstand voltage (peak)	Unit kV Hz A kV	FZN25-12D/T630-20 1 5 630 Arc-quenching ch Earth ,phase 42, in:	0 125 amber fracture 30	
2 Rated 3 Rated 4 Rated insulate	frequenc current ion level	1min power frequency withstand voltage (effective value)	Hz A kV	5 630 Arc-quenching ch	0 125 amber fracture 30	
3 Rated 4 Rated insulation	current ion level	1min power frequency withstand voltage (effective value)	A kV	630 Arc-quenching ch	125 amber fracture 30	
4 Rated insulati	ion level	(effective value)	kV	Arc-quenching ch	amber fracture 30	
4 insulat		(effective value)				
4 insulat		,		Earth ,phase 42, in:	oulating froature 49	
		Lightning impulse withstand voltage (peak)	137		Sulating fracture 46	
5 Rated	dynamic		kV	Earth ,phase 75, in:	sulating fracture 85	
		current (peak)	kA	50	-	
6 4S the	rmal curr	ent	kA	20	-	
7 Rated	Rated power load breaking current		Α	630	125	
8 Rated	Rated closed-loop breaking current		Α	630	125	
9 Rated	cable cha	arge breaking current	Α	10	10	
10 Rated	breaking	no-load transformer capacity	kVA	1600	1600	
11 Rated	open circ	cuit breaking current	KA	-	31.5	
12 Rated	transfer o	current	Α	-	2000	
13 Fuse m	nodel			-	SDLAJ-12, SFLAJ-12	
14 Striker	output e	nergy	J	-	2-5	
15 Rated	Rated short-circuit closed current		kA	50		
16 Earth s	Earth switch rated dynamic current		kA	50		
17 Earth s	Earth switch 2s thermal current		kA	20		
18 Auxilia	ry circuit	rated voltage	٧	AC DC220	AC DC110	
19 Mecha	nical life		times	10000		





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







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

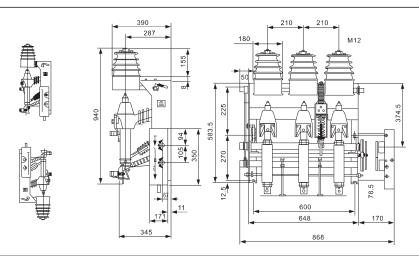
- a. Ambient temperature -25°C-+40°C
- b. Elevation≤1000m
- c. Humidity:daily average humidity≤95%,monthly≤90%
- d. No risk of fire, explosion, serious pollution, chemical corrosion and severe vibration
- e. Pollution degree: II

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 frenquence	Hz	50			
3	Rated amper	Α	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	Α	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			





GW Series Outdoor High Voltage Disconnecting Switch

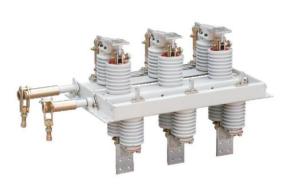


GW4-40.5KV perfect COMPLETE
Outdoor High voltage Disconnecting Switch



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

GN Series Indoor Type High Voltage Isolator Switch

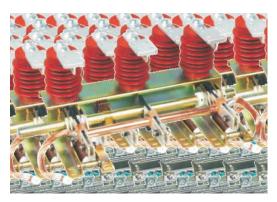


GN30-12 series Indoor Rotary High Voltage Disconnecting Switch

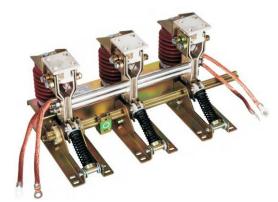


GN19-12 series Indoor High Voltage Disconnecting Switch

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



HY series Polymer type Zinc Oxide Lightning Arrester

