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	kV	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	s	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		