

High Voltage Switch Company - High Voltage Electronic Components



MZZ6-12 Indoor AC High Voltage Vacuum Circuit Breaker

About the Product:

MZZ6-12 Indoor AC High Voltage Vacuum Circuit Breaker is applied to the power system of 50Hz three-phase AC and 7.2kV ~ 12kV rated voltage. It is widely used in various situations for frequent operations of different loads. It protects such electrical equipments as industrial and mining enterprises, power plants and substations. It can be used with KYN28A-12(GZS1) mid-insert handcart power box as well as XGN-□ fixed power box.

This product meets the national standards GB1984 《AC High Voltage Circuit Breaker》、JB3855 《3.6 ~ 40.5KV Indoor AC High Voltage Vacuum Circuit Breaker》 and IEC60056 《AC High Voltage Circuit Breaker》. It also meets DL/T403 《Order Technical Conditions of 10 ~ 35KV Indoor AC High Voltage Vacuum Circuit Breaker》.

Environmental Conditions

Altitude: lower than 1000m

1. Environmental temperature: maximum temperature +40℃, minimum temperature -15℃ (transportation storage at -30℃ is allowed)

2. Environmental humidity:

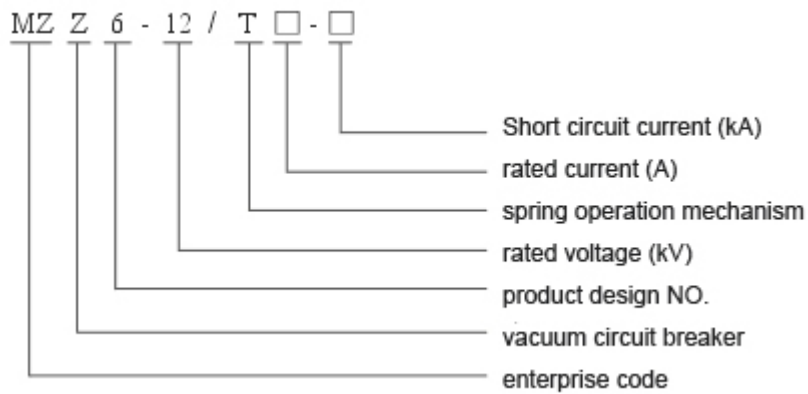
daily average relative humidity: ≤95%

monthly relative humidity: ≤90%

daily saturated evaporation pressure: ≤2.2×KPa

monthly saturated evaporation pressure: 1.8×KPa

Model Meaning



1. main electrical parameters 1 MZZ6-12 vacuum circuit breaker main technical parameters

name		unit	data				
rated voltage		Kv	12	12	12	12	12
rated frequency		HZ	50	50	50	50	50
rated current		A	630、 1250	630、 1250	630、 1250、 1600	1250、 1600、 2000	2000、 2500、 3150
rated insulation level	1min working frequency voltage tolerance	KV	42	42	42	42	42
	rated lightning impact voltage tolerance		75	75	75	75	75
rated short circuit breaking current		KA	16	20	25	31.5	40
rated short circuit closed current (peak value)			40	50	63	80	100
rated (peak value) current tolerance			40	50	63	80	100
rated short circuit current tolerance			16	20	25	31.5	40
rated times of short circuit breaking current			50	50	50	50	30
rated short circuit duration time		second	4	4	4	4	4
secondary circuit working frequency voltage tolerance(1min)		V	2000	2000	2000	2000	2000
rated operation order			O-t-CO-t1-Co				
mechanical life span			30000	30000	30000	30000	10000

*16KA , 20KA , 25KA , 31.5KA : t1=180s; 40kA : t=180s、 t1=180s 3、 MZZ6-12 vacuum circuit breaker mechanical parameters

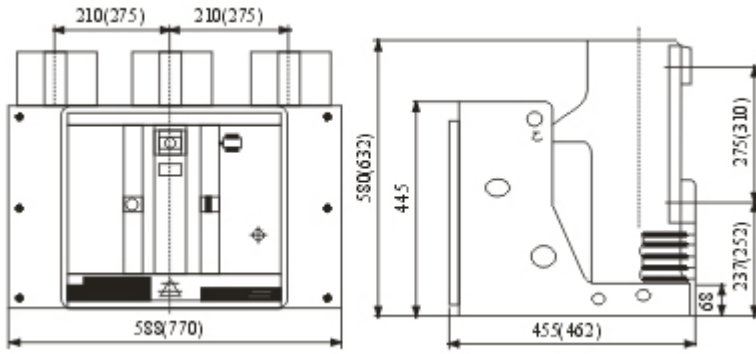
name		unit	data				
contact open size		mm	11±1	11±1	11±1	11±1	11±1
excess travel		mm	3±0.5	3±0.5	3±0.5	3±0.5	3±0.5

different periods of three-phase open/close the switch	ms	<=2	<=2	<=2	<=2	<=2
contact bouncing time of closing switch	ms	<=2	<=2	<=2	<=2	<=2
central distance		210±1.5	210±1.5	210±1.5	210±1.5	210±1.5
contact pressure of closing the switch	N	16KA	20KA	25KA	31.5KA	40KA
		200±200	2400±200	2400±200	3100±200	4250±250
average switch opening speed	ms	1.1±0.2				
average switch closing speed	m/s	0.6±0.2				
Switch opening time, when the operation voltage is:	maximum	ms	≤50			
	rated		≤60			
	minimum		≤60			
switch closing time	ms	≤100				
allowed attrition thickness of dynamic and static contact	mm	3				
main circuit resistance	μΩ	630A	≤50μΩ			
		1250A	≤45μΩ			
		1600-2000A	≤35μΩ			
		2500-3150A	≤25μΩ			
		4000A	≤20μΩ			
rated power of electrical energy storage device	W	70(40KA 100W)				
energy storage time	s	<10				

4、 technical data of opening/ closing switch coils

	opening switch coil	closing switch coil	note
(V)rated operation voltage	DC220,DC110;AC220, AC110	DC220,DC110;AC220, AC110	Do not open the switch when the opening coil is smaller than 30% of rated operation voltage.
(W)coil power	245	245	
normal working voltage range	65% ~ 120% rated voltage	85% ~ 110% rated voltage	

Installation Dimensions



(note): These

parameters are from ZN63A-12/?-40KA.