

High Voltage Switch Company - High Voltage Electronic Components



MZZ7-24 Indoor AC High Voltage Vacuum Circuit Breaker

About the Product:

MZZ7-24 Indoor AC High Voltage Vacuum Circuit Breaker is the latest series generation of 24kV vacuum circuit breaker developed by our company in reference to domestic and foreign advanced technology. The chief design idea is that the main circuit adopts solid closed insulation performance and improves design actuator to make the insulation performance of circuit breaker stable and improve its mechanical reliability.

Thus, free of maintenance and longer mechanical life span as well as electric life are achieved. No explosion hazard or pollution. It is applied to the protection and control for electrical equipments of single generatrix system in industrial and mining enterprises, power plants as well as substations. It also can be used in capacitor and many special occasions.

This product meets the national standards GB1984-2003 《AC High Voltage Circuit Breaker》、IE62271-100 《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:

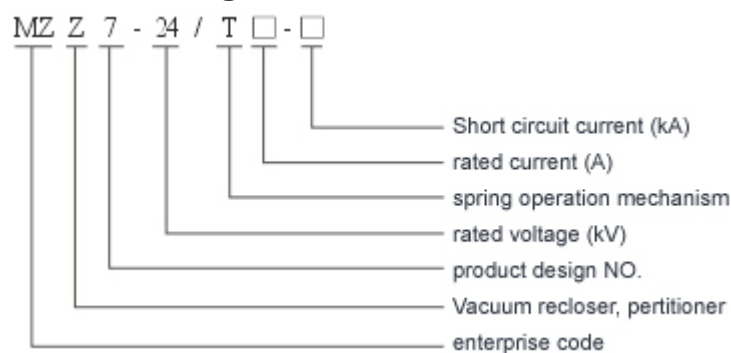
Daily average relative humidity: ≤95%

monthly relative humidity: ≤90%

daily saturated evaporation pressure: ≤2.2×KPa

monthly saturated evaporation pressure: 1.8×KPa

Model Meaning



Main electrical parameters

1. MZZ7-24 main electrical parameters

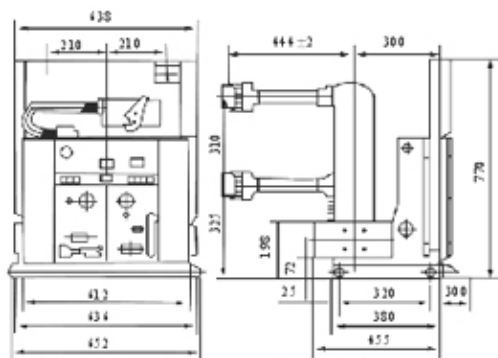
name		unit	data		
rated voltage		Kv	24		
rated frequency		HZ	50/60		
rated insulation level	1min working frequency voltage tolerance	KV	60		
	rated lightning impact voltage tolerance	Hz	125		
rated current		A	1250-3150		
rated short circuit current tolerance (4S)		KA	20	25	31.5
rated peak value current tolerance		KA	50	63	80
rated short circuit breaking current		KA	20	25	31.5
rated closed current		KA	50	63	80
rated times of short circuit breaking current		times	30		
rated short circuit duration time		second	4		
secondary circuit working frequency voltage tolerance(1min)		V	2000		
rated capacitors breaking current		A	400/630		
rated operation order			O-0.3s-CO-180s-CO		
mechanical life span		times	2000(Permanent magnetic body is 60000 times)		

2. MZZ7-24 mechanical parameters

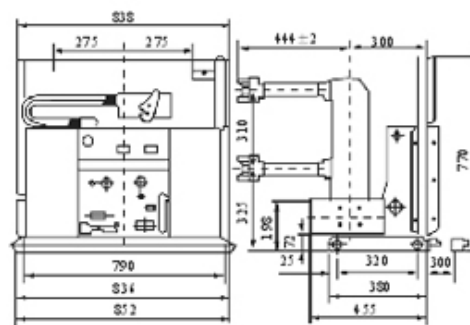
name		unit	data
contact open size		mm	14±1

excess travel	mm	3.5±1
contact bouncing time of closing switch	ms	≤2
different stages of three-phase open/close the switch	ms	≤2
average switch opening speed	ms	1.0±0.2
average switch closing speed	m/s	1.3±0.2
Switch opening time	ms	35-70
switch closing time	ms	20-50
main circuit resistance	μΩ	630A ≤50μΩ 1250A ≤45μΩ 1600 ≤35μΩ 2000A ≤35μΩ 2500 ≤30μΩ 3150A ≤25μΩ
rated power of electrical energy storage device	W	80
energy storage time	s	<10

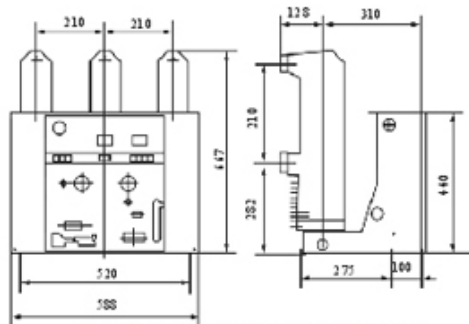
Contour and Installation Dimensions



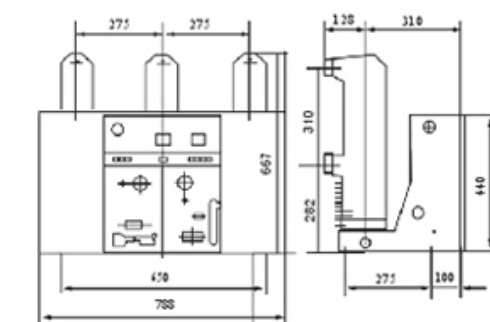
Dimension Diagram of MZZ7-24 Handcart-type, 210 fixed distance series



Dimension Diagram of MZZ7-24 Handcart-type, 275 fixed distance series



Dimension Diagram of MZZ7-24 E Fixed-type, 210 fixed distance series



Dimension Diagram of MZZ7-24 E Fixed-type, 275 fixed distance series