ZN63A(VS1)-24
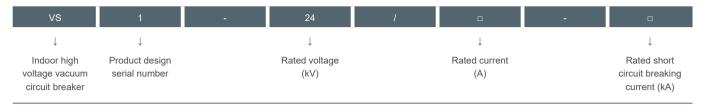
Indoor High Voltage
Vacuum Circuit Breaker

Overview

ZN63(VS1)-24 series indoor AC MV vacuum circuit breaker is an indoor switchgear for three-phase AC 50Hz,rated voltage 4KV power system.The market combines years of professional production experience to develop and design a new generation of vacuum circuit breakers.

ZN63A(VS1)-24
Indoor High Voltage Vacuum Circuit Breaker

CVCLELC ®

Model meaning

VS	1	-	24	/	□	-	□
↓	↓		↓		↓		↓
Indoor high voltage vacuum circuit breaker	Product design serial number		Rated voltage (kV)		Rated current (A)		Rated short circuit breaking current (kA)

Main technical parameters

Item	Units	Argument		
Rated voltage	kV	24		
Rated short-term power frequency withstand voltage (1min)		65/79(alternating, facing ground/fracture)		
Rated lightning impulse withstand voltage (peak value)		125/145(alternating, ground/fracture)		
Rated frequency	Hz	50		
Rated current	A	630 1250	630 1250 1600 2000 2500 3150	630 1250 1600 2000 2500 3150
Rated short-circuit breaking current	kA	20/25	31.5	40
Rated short-time withstand current		20/25	31.5	40
Rated short-circuit duration	s	4		
Rated peak withstand current	kA	50/63	80	100
Rated short-circuit closing current		50/63	80	100
Power frequency withstand voltage of the secondary circuit (1 minute)	V	2000		
Rated breaking current of single/back-to-back capacitor banks	A	630/400(40kA is 800/400)		
Rated capacitor bank closing inrush current	kA	12.5(Frequency not exceeding 1000Hz)		
Mechanical life	Frequency	20000		
Rated current breaking times (electrical life)		20000		
Rated short-circuit current breaking times		50(40kA ≤ 30)		
The cumulative allowable wear thickness of the moving and static contacts	mm	2		
Energy storage time	s	≤ 10		
Contact opening distance	mm	16±1		
Overtravel		3.5±0.5		
Contact closing and bouncing time	ms	≤ 2		
The asynchronous opening and closing of the three phases		≤ 2		
Average opening speed (contact separation -8mm)	m/s	1.5±0.2		
Average closing speed (8mm- contact closure)		0.8±0.2		
Resistance of the dominant electrical circuit	μΩ	≤ 50(630A) ≤ 45(1250A); ≤ 35(1600-2000A) ≤ 25(2500A)		
Rated operating sequence		Score -0.3 Combined score 180s- combined score		

External mounting dimension (mm)

Rated voltage	Rated breaking current	Phase spacing	A	B	C	D
630A	25kA	210	652	682	638	277
1250A	31.5kA					
1600A	40kA	275	852	882	838	377

Rated voltage	w
630A	Φ35
1250A	Φ49
1600A	Φ55