

1. Summarize

ZN65A-40.5 series indoor AC high voltage vacuum circuit breaker (hereinafter referred to as circuit breaker), suitable for three-phase AC,

50Hz, 40.5kV power grid, as control and protection equipment. As a relatively independent circuit breaker unit, can be used with a variety of form of switch cabinet matching use.

1.1 Environmental Conditions

The environmental conditions for normal use of circuit breakers are as follows:

1.1.1 The upper limit of ambient air temperature is +40°C; The lower limit is -25 ° C.

1.1.2 Elevation below 1000m.

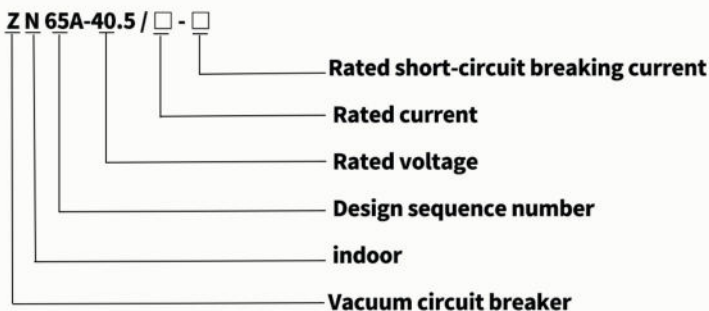
1.1.3 The daily average relative humidity is not more than 95%, and the monthly average is not more than 90%; Daily mean saturated vapor pressure no

Greater than 2.2×10^{-3} MPa, the monthly average is not greater than 1.8×10^{-3} MPa.

1.1.4 No corrosive gas, no frequent violent vibration.

2 Technical Parameters

2.1 Model Significance:



2.2 Technical Parameters

SN	Parameter Name	Unit	Technical Specification		
1	Rated voltage	KV	40.5		
2	Rated current	A	630、1000、1250、1600、2000		
3	Rated short-circuit breaking current	kA	20	25	31.5
4	Dynamic stable current(peak)	kA	50	63	80
5	Heat stable current(4S)	kA	20	25	31.5
6	Rated short-circuit closing current(peak)	Ka	20	63	80
7	Rated short-circuit breaking current breaks times	Times	30		

SN	Parameter Name	Unit	Technical Parameter
8	Rated operation sequence		Open-0.3s-close open-180s-close open
9	Rated lightning impulse withstand voltage(full wave)	kV	185
10	Rated short-time power frequency withstand voltage (1 min)	kV	95
11	Closing time	S	≤ 0.09
12	Switching time	S	≤ 0.075
13	Mechanical life	Times	10000
14	Rated current breaking times	Times	10000
15	The energy storage motor rated frequency	W	≈ 275
16	Energy storage mote rated voltage	V	$\approx 100 \ 200$
17	Energy storage time	S	≤ 15
18	Rated voltage of closing electromagnet	V	-110 220
19	Switch solenoid rated voltage	V	-110 220
20	The energy storage shunt release rated voltage	V	$\approx 110 \ 220$
21	Closing interlock rated voltage	V	$\approx 110 \ 220$
22	The no-voltage trip device rated voltage	V	$\approx 110 \ 220$
23	Rated current of the overcurrent trip device	A	5
24	Rated current of the auxiliary switch	A	AC10 DC5

2.3 The adjustment parameters of mechanical characteristics are shown in the following table

SN	Parameter Name	Unit	Technical Parameter
1	Contact stroke	mm	20 ± 3
2	Contact overstroke	mm	6 ± 2
3	Closing speed	m/s	0.7~1.3
4	Opening speed	m/s	1.1~1.9
5	Contact opening and closing spring time	ms	≤ 2
6	Interphase center distance	mm	$350 \pm 2, 460 \pm 2$
7	Three-phase contact closing and switching synchronization	ms	≤ 2
8	Circuit resistance per phase	$\mu\Omega$	≤ 35

Note: Closing speed refers to the average speed of the last 12mm travel of the moving contact when closing, and opening speed refers to the average speed of the moving contact just minutes 12mm when opening.