

ZN85-40.5/T

型真空断路器 Type Vacuum Circuit Breaker



产品概述

ZN85-40.5 型真空断路器是三相交流 50Hz，额定电压为 40.5kV，户内高压开关设备，断路器可进行频繁的操作，具有多次开断和快速重合闸的能力。作为工矿企业，发电厂及变电站电气设施的控制和保护单元，由于断路器的特殊优越性，尤其适用于要求额定工作电流下频繁操作或多次开断短路电流的场所。

环境条件

- 环境温度：不高于 +40℃，不低于 -15℃。且 24h 内平均温度不超过 +35℃。
- 海拔高度：海拔不超过 1000m。
- 相对湿度：日平均值不超过 95%，月平均值不超过 90%。
- 地震烈度：不超过 8 度。
- 水蒸气压力：日平均值不超过 2.2kPa，月平均值不超过 1.8kPa。
- 无火灾、爆炸危险、严重污秽、化学腐蚀及剧烈震动的场所。

Product Summary

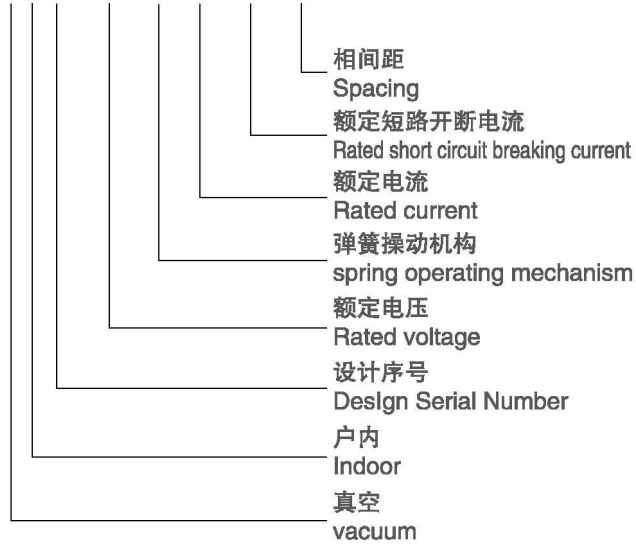
ZN85-40.5 type vacuum circuit breaker is three-phase AC 50Hz, rated voltage of 40.5kV indoor high voltage switch equipment, circuit breaker can be frequent operation, has the ability of multiple open circuit and fast reclosing, As the industrial and mining enterprises, power plants and transformer substation electrical facilities, control and protection unit, because of the special superiority of circuit breaker, especially suitable for requirements rated power flow frequent operation or open circuit short circuit current place many times.

Environmental Conditions

- Ambient Temperature: No more than +40℃, No less than -15℃. Average temperature no more than +35℃ within 24 hours.
- Altitude: No more than 1000m.
- Relative Humidity: Average humidity no more than 95% within one day, Average humidity no more than 90% within one month.
- Earthquake Intensity: No more than 8 degrees.
- Vapor Pressure: Average pressure no more than 2.2kPa within one day, Average pressure no more than 1.8kPa within one month.
- No fire, explosion danger, serious dirt, chemical corrosion and violent vibration for product installed place.

型号说明 Model Explanation

ZN85 -40.5 / T 1250-31.5 -300



产品特点 Product Features

- 有齐备的防误操作联锁，确保了人员和设备的安全，操作方便，维护简单。
- 操作机构置于真空灭弧室前的机箱内，其操作性能与灭弧室开合性能更加吻合，减少了不必要的中间环节，使断路器性能更加可靠。
- 断路器总体布局合理、美观、简洁。
- 采用改良的丝杠推进机构，省力、平稳、自锁性能好。
- ZN85 操作机构采用 VS1 相同形式的弹簧操作机构，具有结构简单、可靠成熟、寿命长、维护少等特点。
- With completely mechanism prevent mis-operation lockout device, ensure safety for human and device, easy operation and simple maintenance.
- Operating mechanism is in the case, which is front of the vacuum interrupters, the performance can be much fit with vacuum interrupters, and reduce unnecessary intermediate links, so it can be more reliable.
- Overall layout of VCB is reasonable, beautiful, and simple.
- Adopt with improved screw propulsion mechanism, save effort, smooth and good self-locking.
- Operating mechanism ZN85 is adopt with spring operating mechanism, the same type with VS1, structure simple, reliable, long lifespan and few maintenance.

技术参数

Technical Parameters

序号 Sr.	项目 Item	单位 Unit	数值 Value
1	额定电压 Rated voltage	kV	40.5
2	额定频率 Rated frequency	Hz	50
3	额定短时工频耐受电压 (1min) Rated short-time power frequency withstand voltage (1min)	kV	95
4	额定雷电冲击耐受电压 Rated lightning impulse withstand voltage	kV	185
5	额定电流 Rated current	A	630~2500
6	额定短路开断电流 Rated short circuit breaking current	kA	20/25/31.5
7	额定短时耐受电流 (4s) Rated short-time withstand current	kA	20/25/31.5
8	额定短路关合电流 Rated duration of short-circuit	kA	50/63/80
9	额定短路持续时间 Rated duration of short-circuit	s	4
10	额定短路开断电流直流分量 Rated short circuit breaking current of the DC component	%	40
11	额定电缆充电开断电流 Rated cable-charging breaking current	A	50
12	额定操作顺序 Rated operating sequence		O-0.3s-CO-180s-CO
13	额定单个 / 背对背电容器组开合电流 Rated Single unit/back to back capacitor bank making current		400/630 (可协商) (Negotiable)
14	触头允许磨损厚度 Contact erosion limit	mm	3
15	分闸时间 Opening time	ms	35-60
16	合闸时间 Closing time	ms	50-100
17	合闸弹跳时间 Closing bounce time	ms	≤3
18	三相合分不同期时间 3 phase open and close synchronism	ms	≤2
19	分闸速度 (分闸后 15mm) Opening speed(contact stroke-15mm)	m/s	1.6-2
20	合闸速度 Closing speed	m/s	0.5-0.8
21	触头反弹幅值 Contact bounce amplitude	mm	≤3
22	机械寿命 Mechanical life	次 /Times	10000
23	触头开距 Clearance between open contacts	mm	22 ± 2
24	触头超行程 Contact over travel	mm	7.5 ± 1.5
25	主导电回路电阻 Main electric circuit of resistance	μΩ	≤55
26	额定操作电压 Rated operation voltage	V	AC 110/220 DC110/220
27	储能电机额定电压 Energy-storage motor rated voltage	V	AC 110/220 DC110/220
28	储能时间 Energy storage time	s	≤15
29	储能电机功率 Energy storage motor power	W	230

注：4000A 需强制风冷。 Note: Air cooling is necessary when in 4000A.