

产品特点 Features

ZW7-40.5型户外高压真空断路器用于交流50Hz、电压40.5kV的三相电力系统，作为分断、关合负荷电流、过载电流及短路电流之用。

The ZW7-40.5 outdoor high voltage vacuum circuit breakers for AC 50Hz, voltage 40.5kV three-phase power system, as breaking, closing load current, overload current and short circuit current.

型号含义 Type meaning

ZW7-40.5 / 1600 - 31.5

额定短路开断电流	Rated short-circuit breaking current
额定电流(A)	Rated current (A)
额定电压(kV)	Rated voltage (kV)
设计序号	Design number
户外真空断路器	Outdoor vacuum circuit breaker

使用环境 Using environment

- 周围空气温度：上限40℃，下限-30℃
- 海拔：≤2000m(若需增高海拔，则额定绝缘水平相应提高)
- 风压：不超过700Pa(相当于风速34m/s)
- 振幅：地震烈度8度
- 污秽等级：III级
- 最大日温差：不超过25℃
- Ambient air temperature: lower than 40 °C, higher than -30 °C
- Altitude: ≤ 2000m (For higher altitude, is a corresponding increase in the rated insulation level)
- Pressure: no more than 700Pa (equivalent to wind speed 34m / s)
- Amplitude: 8 degree earthquake intensity
- Pollution class: III level
- The maximum daily temperature difference: no more than 25°C

主要功能 Main function

- 采用真空灭弧，开断能力强，电寿命长，机械寿命10000次
 - 结构简单，免维护，不检修周期长
 - 绝缘性能好，防污秽能力强
 - 可支配弹簧或电磁操动机构，机械性能可靠，可频繁操作；
- 无火灾和爆炸隐患：
- 内装电流互感器，精度达0.2级，可实现三相互动保护
 - 内附凝露控制器，能保持断路器在一定的温、湿度下可靠运行
 - Vacuum interrupter, the breaking capacity, long life, mechanical life of 10,000
 - Simple structure, maintenance-free, long maintenance cycle
 - Good insulation properties, the ability of anti-filthy
 - Disposable spring or electromagnetic actuator, the mechanical properties of reliable, frequent operation; No fire and explosion hazards;
 - Built-in current transformer accuracy of 0.2, can achieve the protection of three-phase interaction
 - Included condensation controller, able to maintain the reliable operation of the circuit breaker under certain temperature and humidity

技术参数 Technology parameter

序号 NO.	名称 Name		单位 Unit	数据 Data
1	额定电压 Rated voltage		kV	40.5
2	额定绝缘水平 Rated insulation	工频耐受电压 Power frequency withstand voltage	干式 Dry type	95
			湿式 Wet type	80
	雷电冲击耐压(峰值) Power frequency withstand voltage			185
3	额定电流 Rated current		A	1250, 1600, 2000
4	额定短路开断电流 Rated short-circuit breaking current		kA	20, 25, 31.5
5	额定操作顺序 Rated sequence operations			Off分-0.3s on/分 合分-180s on/off 合分
6	额定短路电流开断次数 Rated short-circuit breaking current times		次 Time	12
7	额定短路关合电流(峰值) Rated short-circuit making current(peak)		kA	50, 63, 80
8	额定峰值耐受电流 Rated peak withstand current		kA	50, 63, 80
9	额定短时耐受电流 Rated short-time withstand current		kA	20, 25, 31.5
10	额定短路持续电流 Rated short-circuit current		s	4
11	平均分闸速度 Average opening speed		m/s	1.5 ± 0.2
12	平均合闸速度 Verage closing speed		m/s	0.7 ± 0.2
13	触头合闸弹跳时间 Contact closing bounce time		s	≤ 2
14	三相合(分) 闸同期性时差 Three-phase switch closing/opening synchrony		s	≤ 2
15	合闸时间 Closing time		s	≤ 150
16	分闸时间 Opening time		s	≤ 60
17	机械寿命 Mechanic life		次 Time	10000
18	额定操作电压及辅助回路额定电压 Rated operation voltage and reated voltage of auxiliary loop		V	DC220, 110, 24
				AC220, 110, 24
19	每相回路直流电阻(不含互感器) Each phase loop DC resistance(without transformer)		$\mu \Omega$	≤ 100
20	动静触头允许磨损厚度 Static and dynamic contact wear allowance thickness		Mm	3
21	重量 Weight		Kg	800

外形尺寸及安装图 Outline and installation dimensions

