

TZN2C-12 Indoor High-voltage AC Vacuum Circuit Breaker (Laterally-installed)

户内高压交流真空断路器（侧装式）

一、General 产品概述

TZN2C-12 series of indoor laterally vacuum circuit breakers are used in the switchgear rated 12kV, 50(60)Hz. They are suitable for making different types of loads and frequent operation, to protect and control the electric equipments in industrial & mining enterprises, power plants and substations.

TZN2C-12 系列户内高压交流真空断路器（侧装式）适用于电压 12kV 、额定频率为 50（60）Hz 的电力系统的户内开关设备，用于投切各种不同性质的负荷及频繁操作规程的场所，可供工矿企业、发电厂及变电站电气设备的保护和控制之用。



二、Normal service condition 正常使用条件

- Ambient temperature: $-15^{\circ}\text{C} \sim +40^{\circ}\text{C}$

环境温度：上限： $+40^{\circ}\text{C}$ ； 下限： -15°C ；

- Altitude: $\leq 1000\text{m}$ 海拔： $\leq 1000\text{m}$

- Relative humidity: daily average relative humidity $\leq 95\%$
monthly average relative humidity $\leq 90\%$

相对湿度：日平均相对湿度不大于 95%

月平均相对湿度不大于 90%

- Free from fire, explosion, heavy pollution, chemical corrosion and severe vibration.
无火灾、爆炸危险、严重污秽、化学腐蚀及激烈振动场所
- The earthquake intensity ≤ 8 degree 地震烈度不超过 8 度
- If the service condition differs from the above , the user should consult it with manufacturer.
超出正常使用条件时，用户可与制造厂协商。

三、Technical Parameter 开关柜主要技术参数

No. 序号	Item 项目	Unit 单位	Parameter 参数	
1	Rated voltage 额定电压	kV	12	
2	Rated frequency 额定频率	Hz	50 (60)	
3	Rated short-time power frequency withstand voltage(1min) 额定短时工频耐受电压 (1min)	kV	42	
4	Rated lighting impulse withstand voltage 额定雷电冲击耐受电压	kV	75	
5	Rated current 额定电流	A	630、1250	630、1250
6	Rated short-time withstand current 额定短时耐受电流	kA	25	31.5
7	Rated peak withstand current 额定峰值耐受电流	kA	63	80
8	Rated short-circuit breaking current 额定短路开断电流	kA	25	31.5
9	Rated short-circuit making current 额定短路关合电流	kA	63	80
10	Rated operating sequence 额定操作顺序	/	O-0.3s-CO-180s-CO	
11	Short-circuit current breaking current 短路电流开断次数	Times 次	274	
12	Rated capacitor bank breaking current 额定电容器组开断电流	A	630/400	
13	Mechanical lifespan 机械寿命	Times 次	20000	

四、Feature 产品特点

TZN2C-12 series laterally-installed vacuum circuit breaker is a new generation product, developed on the basis of various laterally-installed circuit breakers, featuring with small size, high reliability and maintenance free.

The vacuum arc extinction device adopts the design equipping the vacuum arc extinction chamber and main electric conduction loop into a solid insulation poles by epoxy resin insulation poles. Therefore, the product performs with reliable insulation. The arc extinction chamber surface avoids environmental influence and it realized the maintenance-free purpose.

Flexible installation modes make it easy to integrate it with disconnecter and load switch, and both sides are optional for the installation.

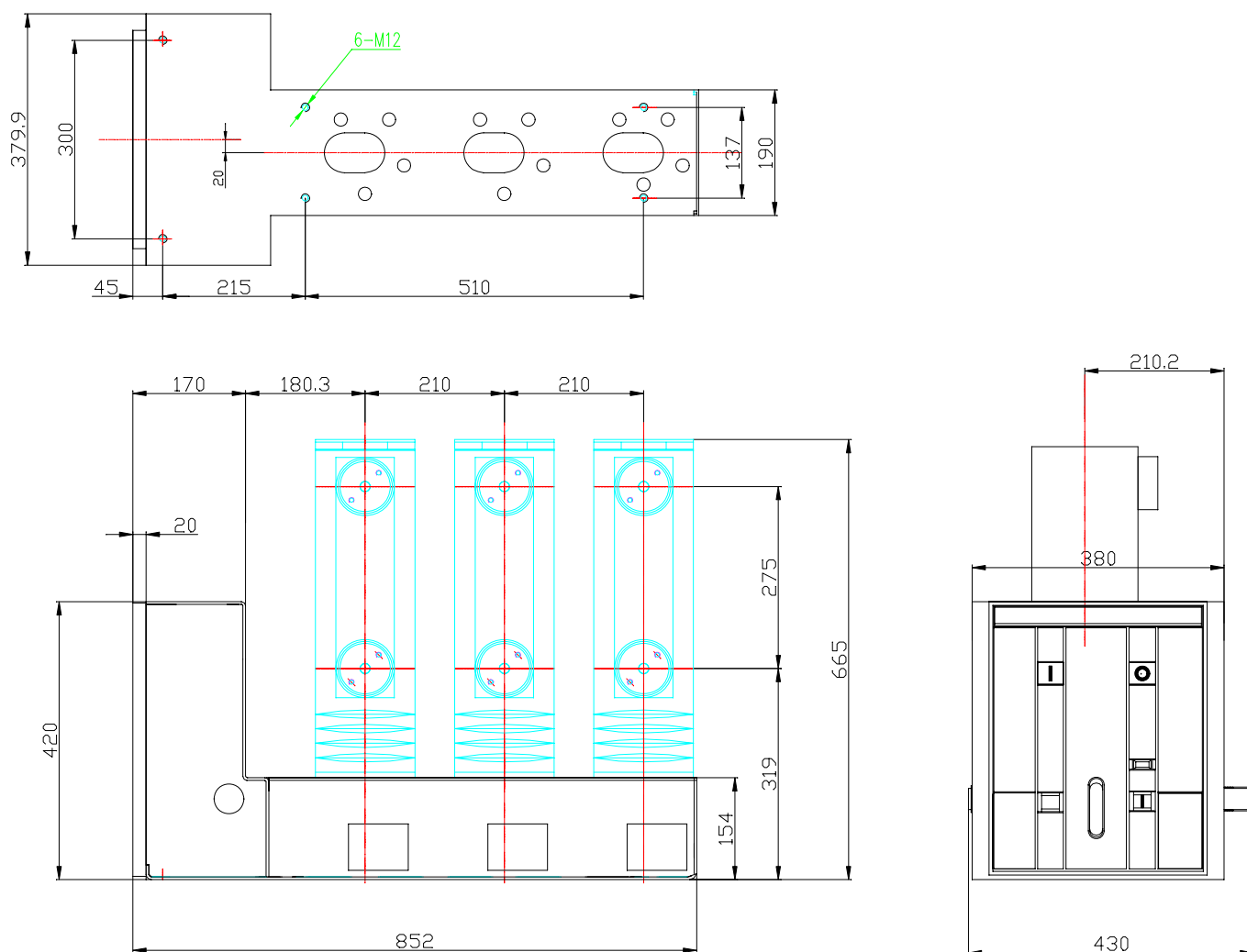
TZN2C-12 系列户内侧装真空断路器是在多种侧装断路器产品的基础上, 为进一步实现真空断路器的小型化、高可靠、

免维护而设计的新一代产品。

该系列断路器灭弧装置采用环氧树脂绝缘筒将真空灭弧室、主导电回路装配成一个整体,绝缘可靠、真空灭弧室表面受外界环境的影响小,真正实现免维护;

安装方式灵活,能方便地与隔离开关、负荷开关的配合,左右侧均可安装。

五、Dimension (fixed type) 外形尺寸 (固定式)



额定电流 (A) Rated current	630	1250
开断电流 (kA) Breaking current	20 25 31.5	20 25 31.5
相间距 (mm) Distance between phases	210	

