

XGN17C-40.5

固定式金属封闭开关柜 Fixed Type Metal-clad Switchgear



产品概述

XGN17C-40.5 箱型固定式开关设备（以下简称“开关柜”）系三相交流 50/60Hz 的户内成套配电装置，作为接受和分配 40.5kV 及以下的网络电能之用。它特别适合于进出线回路数多，连接的电源较广，负荷大及电流变化频繁的变配电站。在配用主开关为真空断路器时，也特别适用需要频繁操作的场所。如工业电炉、电动机及电容器等回路。

环境条件

1. 环境温度：不高于 +40℃，不低于 -15℃。且 24h 内平均温度不超过 +35℃。
2. 海拔高度：海拔不超过 1000m。
3. 相对湿度：日平均值不超过 95%，月平均值不超过 90%。
4. 地震烈度：不超过 8 度。
5. 水蒸气压力：日平均值不超过 2.2kPa，月平均值不超过 1.8kPa。
6. 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

This fixed type switchgear XGN17C-40.5 is an indoor switchgear assembly operating under the condition of 50/60 Hz AC three phase and rated 40.5kV AC voltage, which applied to the transmission and distribution of 40.5kV or lower net power energy. It is specially suit for the transformer or distribution stations of more incoming & outgoing circuits, wider supply connection, high load and current change frequently. Once equipped with the vacuum circuit breaker as main switch, this switchgear is also suit for the frequent operating condition, such as industry electric furnace, motor, capacitor and other circuits.

Environmental Conditions

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

产品特点

1. XGN17-40.5 开关设备为固定式结构，该产品根据 GB3906 和 DL/T404 标准，并参照 IEC-289 国际标准的要求研制而成。其基本骨架均由型钢及钢板弯制件焊接而成，柜体外壳具有 IP2X 防护等级。本开关设备主要由前柜和后柜拼装而成，柜内带电体间均以空气绝缘为主，各项带电体之间及相对地之间的绝缘距离不小于 300mm。
2. 柜内配有性能优良的真空断路器，Cu-Cr 合金触头材料，开断短路电流能力强、截流值小、电场分布均匀，并设有可靠的五防闭锁功能。由于断路器可靠性高，可以大大减少停电检修时间和次数。并且该柜运行方案齐全，有单母线运行方式及旁路母线运行方式，能实现不间断供电。

Product Features

1. The structure of XGN17-40.5 is fixed type AC metal switchgear, this product is according with GB3906 of DL/T404, and also with the standard of IEC-289. The basic cabinet is welding of fold bended section steels and steel plates, the protect degree of the panel can be IP2X. This switchgear is assembled with front cabinet and back cabinet. The charged bodies in the cabinet can be mainly isolated by air. The insulation distance between every charged bodies and phase to earthed should be no less than 300mm.
2. Excellent performance VCB is equipped in the panel, the material of contactor is Cu-Cr alloy, strong capability of breaking short-circuit current, low chopping current, uniform electric field, and well meet the function of "five-prevent". Because of reliable VCB, it can greatly reduce the time and quantity of blackout maintain. The scheme of this switchgear is complete, it can realize UPS by means of single busbar opening and inter busbar operating as well.

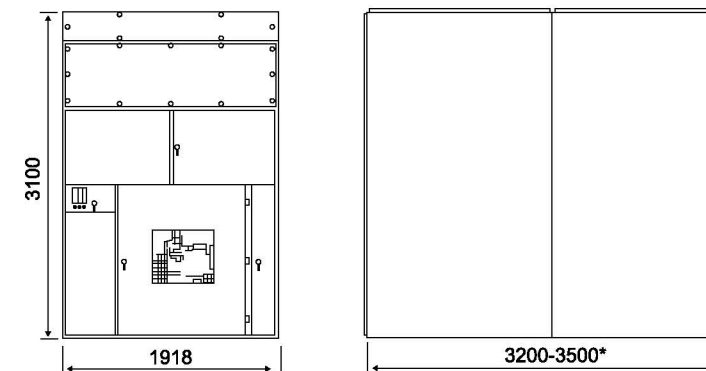
技术参数

Technical Parameters

序号 Sr	名称 Content	单位 Unit	数值 Value	
1	额定电压 Rated Voltage	kV	40.5	
2	额定电流 Rated Current	A	630/1250/1600/2000/2500	
3	额定频率 Rated Frequency	Hz	50/60	
4	1min 工频耐受电压 Frequency Withstand Voltage in 1min	级间、对地 Phase, Earthed	kV	95
		隔离断口 Isolated Fracture	kV	110
5	雷电冲击耐受电压（峰值） Lightning Impulse Withstand Voltage(Peak)	级间、对地 Phase, Earthed	kV	185
		隔离断口 Isolated Fracture	kV	215
6	主母线额定电流 Main Busbar Rated Current	A	630/1250/1600/2000/2500	
7	分支母线额定电流 Branch Busbar Rated Current	A	630/1250/1600/2000/2500	
8	额定短路开断电流 Rated Short-circuit Breaking Current	kA	20/25/31.5	
9	额定短时耐受电流（4s） Rated Short-time Withstand Current(4s)	kA	20/25/31.5	
10	额定峰值耐受电流 Rated Peak Withstand Current	kA	50/63/80	
11	额定短路关合电流 Rated Short-circuit Current	kA	50/63/80	
12	1min 辅助回路工频耐受电压 Aux. circuit Frequency Withstand Voltage in 1min	V	2000	
13	防护等级 Protect Degree	IP	IP2X	
14	辅助控制回路额定电压 Rated Voltage of Aux. control Circuit	V	交流或直流 110/220 AC 110 / DC 220	

开关柜结构尺寸示意图

Structure Dimension and Sketch



3500*: 带旁路方案。
3500*: With shunt circuit Scheme