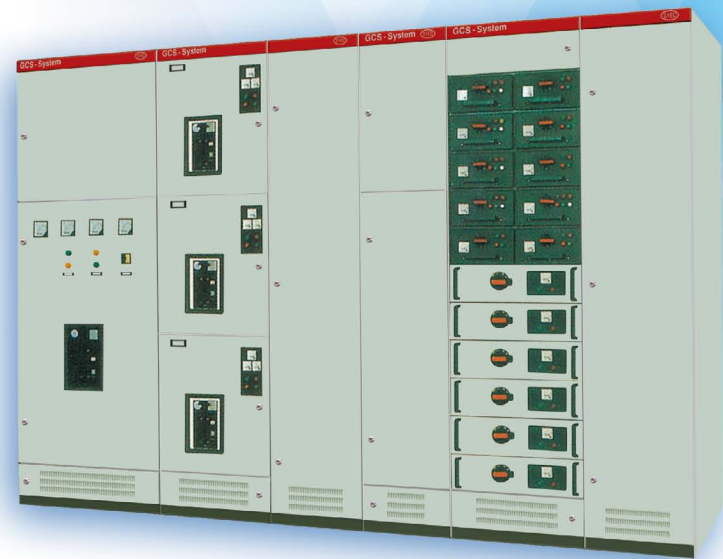


GCS

低压开关柜 Low-voltage Switchgear



产品概述

GCS 低压抽出式开关柜适用于发电厂、石油、化工、冶金、纺织、高层建筑等低压配电系统。在大型发电厂、石化系统等自动化程度高，要求与计算机接口的场所，作为三相交流频率为 50/60Hz、额定工作电压为 380V/400/660，额定电流为 4000A 及以下的发、供电系统中的配电、电动机集中控制、无功功率补偿使用的低压成套配电装置。

Product Summary

GCS low-voltage switchgear is suitable for the low voltage distribution system in power plant, petroleum industry, chemical industry, metallurgy industry, spinning mill, high buildings etc. It especially used in large power plant, petrochemical system and other locations which are required high automatic and computer interface; it is serviced in the low voltage apparatus distribution devices of generator and power supply system distribution, motor central control and reactive power compensate of 3 phase AC. Frequency 50/60Hz, rated service voltage 380/400/600, rated current 4000A and lower.

环境条件

1. 运行条件：户内；
2. 海拔高度：≤ 2000m；
3. 地震烈度不大于 8 度；
4. 周围空气温度上限：+40℃；
5. 24 小时平均温度上限：+35℃；
6. 周围空气温度下限：-5℃；
7. 周围环境相对湿度在 +40℃ 时为 50%；
8. 没有火灾、爆炸危险、严重污秽及足以腐蚀金属和破坏绝缘的气体等恶劣场所；
9. 没有剧烈震动、颠簸的场所。

Environmental Conditions

1. Operating Condition: Indoor.
2. Altitude: No more than 2000m.
3. Earthquake Intensity: No more than 8 degrees.
4. Ambient Temperature: No more than +40℃ .
5. Average temperature within 24 hours: No more than +35℃ .
6. Ambient Temperature: No less than -5℃ .
7. Relative Humidity: 50% when the temperature is +40℃ .
8. No fire, explosion danger, serious dirt, chemical corrosion and violent vibration for product installed place.
9. No violent vibration, shake and bumpy site.

产品特点

1. 提高转接件的热容量，较大幅度的降低由于转接件的温升到接插件、电缆头、间隔板带来的附加温升。
2. 功能单元之间，隔离之间的分割清晰、可靠、不因某一单元的故障而影响其他单元工作，使故障局限在最小范围。
3. 母线平置式排列，其动、热稳定性好，能承受 80/176kA 短路电流的冲击。
4. MCC 柜单柜的回路数量多至 22 回，充分考虑了单机容量大的发电厂，石化系统等行业自动化电动门（机）群的需要。
5. 装置与外部电缆的连接在电缆隔室中完成，电缆可以上下进出。零序电流互感器置于电缆隔室内，使安装维修方便。
6. 同一电源配电系统，可以通过限流电抗器匹配限制短路电流，稳定母线电压在一定的数值，还可部分降低对元器件短路强度的要求。
7. 抽屉单元有足够数量的二次转插件（1 单元及以上为 32 对，1/2 单元为 20 对），可满足计算机接口和自控回路对接点数量的要求。

Product Features

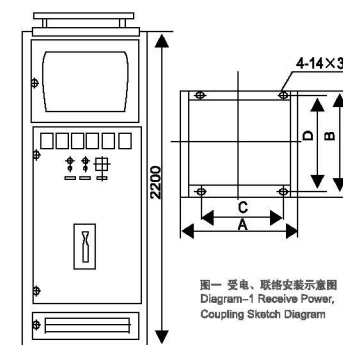
1. It can be increased the thermal capacity of adaptor parts. Also it can be effectively and evidently reduced the temperature rise of adaptor parts or additional temperature rise of cable lug and partition plate.
2. The compacts between function units and segregations are clearly and reliable; owing to fault of any function unit it is impossible to affect any other function units. So it can limit faults in the minimum area.
3. Basbar horizontal arrange, and it has high dynamic and thermal stability capacity, also can withstand the impulse of 80/176kA short-circuit current.
4. The quantity of circuit of a single MCC panel is up to 22 Nos., this can satisfy requirements of power plant which has high capacity of single generator; automatic motor control door (machine) set of petrochemical system and other industries.
5. The connections of devices and external cable are accomplished in the cable chamber the method of cable incomer and outgoing can either top or bottom incomer and outgoing. Zero-sequence current is installed in the cable chamber which can convenient install and maintain.
6. For the same power supply distribution system, it can limit the short circuit current by limit-current reactor; also can steady the busbar voltage variation in the allowed value scope. So it could partly reduce requirements of component short circuit strength.
7. Drawer units have enough quantity secondary adaptors (There are 32 pairs secondary adapter in 1 unit and upper, 20 pairs in 1/2 unit), so it can satisfy the requirements of computer inputs and auto control circuits.

技术参数

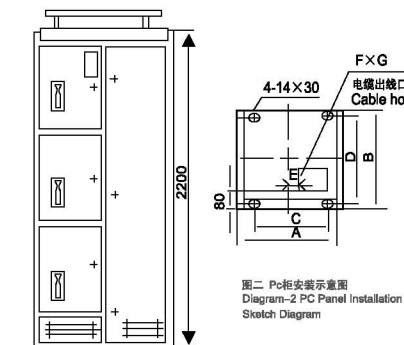
序号 Sr.	名称 Content	单位 Unit	数值 Value	
1	额定工作电压 Rated Operating Voltage	V	380/660	
2	额定绝缘电压 Rated Insulation Voltage	V	660/1000	
3	额定频率 Rated Frequency	Hz	50/60	
4	主母线 Main Bus-Bar	额定电流 Rated Current	A	≤4000
		额定短时耐受电流 (1s) Rated Short-time Withstand Current(1s)	kA	≤80
		额定峰值耐受电流 Rated Peak Withstand Current	kA	≤176
5	配电母线 Distribution Bus	额定电流 Rated Current	A	≤1000
		额定短时耐受电流 (1s) Rated Short-time Withstand Current(1s)	kA	≤65
		额定峰值耐受电流 Rated Peak Withstand Current	kA	≤143
6	Imin 辅助回路工频耐受电压 Aux. circuit Frequency Withstand Voltage in 1min	kV	2	
7	额定脉冲耐受电压 Rated Impulse Withstand Voltage	kV	8	
8	防护等级 Protect Degree	IP	至 IP54To IP54	
9	电气间隙 Electrical Clearance	mm	≥10	
10	爬电距离 Creepage Distance	mm	≥12.5	
11	过电压等级 Over-voltage Level	-	III / IV	
12	污染等级 Class of Pollution	-	3	

Technical Parameters

开关柜结构尺寸示意图

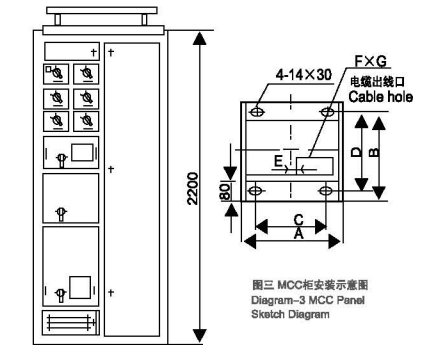


规格代号 Type/Panel Code	A	B	C	D	备注 remark
GCS-TG1010-4	1000	1000	890	950	联络柜 Coupling Panel
GCS-TG0810-4	800	1000	690	950	受电柜 Receiv Panel
GCS-TG0808-4	800	800	690	750	受电柜 Receiv Panel
GCS-TG0808-4	600	800	490	750	受电柜 Receiv Panel



规格代号 Type/Panel Code	A	B	C	D	E	F x G
GCS-TG1010-2	1000	1000	890	950	100	350 x 220
GCS-TG0810-2	800	1000	690	950	100	250 x 220
GCS-TG1008-2	1000	800	690	750	100	350 x 220
GCS-TG0808-2	800	800	690	750	100	250 x 220

Structure Dimension and Sketch



规格代号 Type/Panel Code	A	B	C	D	E	F x G
GCS-TG1010-2	1000	1000	890	950	100	350 x 220
GCS-TG0810-2	800	1000	690	950	100	250 x 220