



### 用途 Application

YFGZ2 系列直流电源柜（微机控制）应用于大中小型发电厂和变电站，作为正常运行和事故状态下的高压开关分合闸、继电保护、自动控制、事故照明、灯光和音响信号等所需的直流电源；也可应用于冶金、铁道、矿山、石化、邮电、通讯、医疗卫生、银行、宾馆、高层建筑和计算机网络等行业所需的直流电源；微机控制直流电源柜可用于无人值守、远程集中监控的发电厂、变电站和其他行业的直流电源。本产品符合 JB/T5777.4-2000《电力系统直流电源设备通用技术条件及安全要求》标准。

YFGZ2 series DC power supply cabinets (microcomputer controlled) are widely applied to large/middle and small scale power plants and transformer substations, used as DC power supply for HV switch making/breaking, relaying, automatic control, emergency lighting and light/sound signal in normal condition or emergency state; also can be applied to fields like metallurgy, railway, mine, petrochemical, posts and telecommunications, communication, medical health, bank, hotel, high-rise, computer network, etc; the microcomputer controlled DC power supply cabinets are useful for power plants, transformer substations and other industries that require unmanned control and remote centralized monitoring. The product is in accordance with JB/T5777.4-2000 General specification and safety requirements for DC power supply equipment of power projects.



### 产品型号及含义 Product type and meaning



产品型号 Model	序号说明 Description	规格(种)Spec.	适用范围 Range of application
YFGZ2-30-□/□	单组电池、单母线分段、二台双线圈输出充电浮充电装置、无降压回路 Single battery, single-busbar section, two pieces of double-line output charging floating charger, no voltage reducing circuit	10	发电厂或大型变电站 Power plant or large-scale transformer substation
YFGZ2-31-□/□	单组电池、单母线、二台双线圈输出充电浮充电装置、无降压回路 Single battery, single-busbar, two pieces of double-line output charging floating charger, no voltage reducing circuit	10	发电厂或大型变电站 Power plant or large-scale transformer substation
YFGZ2-32-□/□	单组电池、双母线分段、二台双线圈输出充电浮充电装置 Single battery, double-busbar section, two pieces of double-line output charging floating charger	20	12kV-220kV 变电站和中小型电厂 Transformer substation and middle/small-scale power plant
YFGZ2-33-□/□	单组电池、双母线、二台双线圈输出充电浮充电装置 Single battery, double-busbar, two pieces of double-line output charging floating charger	20	12kV-220kV 变电站和中小型电厂 Transformer substation and middle/small-scale power plant
YFGZ2-34-□/□	单组电池、双母线分段、二台三线圈输出充电浮充电装置 Single battery, double-busbar section, two pieces of three-line output charging floating charger	20	12kV-220kV 变电站和中小型电厂 Transformer substation and middle/small-scale power plant
YFGZ2-35-□/□	单组电池、双母线、二台三线圈输出充电浮充电装置 Single battery, double-busbar, two pieces of three-line output charging floating charger	20	12kV-220kV 变电站和中小型电厂 Transformer substation and middle/small-scale power plant
YFGZ2-40-□/□	双组电池、单母线分段、二台双线圈输出充电浮充电装置、无降压回路 Double battery, single-busbar section, two pieces of double-line output charging floating charger, no voltage reducing circuit	10	需要发电厂或大型变电站 Key power plant or large-scale transformer substation
YFGZ2-41-□/□	双组电池、双母线、二台双线圈输出充电浮充电装置 Double battery, double-busbar, two pieces of double-line output charging floating charger	12	12kV-220kV 变电站和中小型电厂 Transformer substation and middle/small-scale power plant
YFGZ2-42-□/□	单组电池双母线分段、三台双线圈输出充电浮充电装置 Single battery, double-busbar section, three pieces of two-line output charging floating charger	10	需要发电厂或大型变电站 Key power plant or large-scale transformer substation
YFGZ2-43-□/□	双组电池、双母线、二台三线圈输出充电浮充电装置 Double battery, double-busbar, two pieces of three-line output charging floating charger	12	12kV-220kV 变电站和中小型电厂 Transformer substation and middle/small-scale power plant

**使用环境条件 Environmental condition**

- 1、海拔高度：2000m 及以下（若超过 2000m，可与本公司协商解决）。
- 2、环境温度：-5℃ ~+40℃。
- 3、相对湿度：不大于 90%。（20 ± 5℃时）。

注：特殊条件可与本公司协商解决。

1. Altitude: 2000m and below (if exceed 2000m, please contact us).
2. Ambient temperature: -5℃ ~+40℃ .
3. Relative humidity: not over 90%. (20 ± 5℃ ).

Note: Please contact us for special conditions.

**主要技术参数 Main technical parameter**

- 1、输入电源电压，三相交流 Input mains voltage, three-phase AC 380V ± 10%，50Hz ± 5%。
- 2、输出直流电压额定值 Output DC voltage rated value: 48V; 110V; 220V
- 3、输出直流电流额定值 Output DC current rated value: 5A, 8A, 10A, 15A, 20A, 30A, 40A, 50A。
- 4、蓄电池额定容量 Rated capacity of storage battery: 10Ah, 20Ah, 38Ah, 40Ah, 50Ah。
- 5、电压调节范围 Voltage regulating range( 见表 )
- 6、输出直流电流调节范围：额定值的 0~100%。 Output DC current regulating range: 0~100% of rated value.
- 7、稳压精度 Voltage stabilizing accuracy: < ± 1%。
- 8、稳流精度 Current stabilizing accuracy: < ± 1%。
- 9、纹波系数 Ripple ratio: < 1%。
- 10、整机噪声 Noise of complete machine: < 55dB。
- 11、主变压器温升 Temperature rise of main transformer: < 70℃。
- 12、工作方式 Working mode: 连续工作。
- 13、效率 Efficiency > 90%。
- 14、防护等级 Degree of protection: IP20-IP30。

项目 Item			
输出直流电压额定值 Rated value of output DC voltage	48V	110V	220V
浮充电压调节范围 Regulating range of float charge voltage	43~57	99~130	198~260
均充电压调节范围 Regulating range of average charge voltage	54~62	125~140	198~286
主充电压调节范围 Regulating range of main charge voltage	43~70	99~162	187~310

**主要功能 Main functions**

1. 规格齐全：该系列产品共有十种型号几百种规格，能完全满足大中小型发电厂、变电站和各行业对直流电源的需求。
2. 运行可靠：交流双路输入自动切换。该产品设有二台充电浮充电装置互为备用，系统切换方便。
3. 运行稳定：该产品抗干扰性能好，稳流、稳压精度高，纹波系数小。
4. 电池使用寿命长：该产品能严格按照蓄电池充电曲线对蓄电池进行充电、浮充电，避免过充或欠充现象，微机控制型具有电池巡检功能。
5. 多重保护：该产品能对各工作点跟踪检测，软件与硬件保护相结合。绝缘检测装置随时监察母线绝缘状况。
6. 运动通讯：微机控制直流电源柜能与上位微机通讯，能实现集中监控和无人值班。

1. Complete specifications: This series of products possesses more than ten models with hundreds of specifications, for satisfying DC power supply demand of large/middle/small scale power plants, transformer substation and other industries.
2. Reliable operation: AC double-circuit input automatic switching. The product is equipped with two float charging devices that are reserved for each other, with convenient system switching.
3. Stable operation: The product has fine anti-interference ability, high current/voltage stabilizing accuracy, low ripple ratio.
4. Long service life of battery: The product is able to charge and float charge the storage battery according to the charging curve of storage battery strictly, free from over-charging or under-charging. The microcomputer controlled type also has battery cyclic detection function.
5. Multiple protections: The product is able to track and detect every working point, with combined software and hardware protection. The insulation monitoring device will monitor the insulation condition of busbar at all hours.
6. Motion communication: The microcomputer controlled DC power supply cabinet is able to communicate with upper supervising computer, and realize centralized monitoring and unmanned control.

## YFGZ2 直流电源柜

Power supply cabinet



产品主要规格 ( 铅酸免维护电池 ) Main specifications ( maintenance-free lead-acid battery)

序号 No.	蓄电池额定容量 (Ah) Rated capacity of storage battery	蓄电池输出电压 (V) Output voltage of storage battery	控母额定电流 (A) KM. rated current	合母冲击电流 (A) Bus combining impulse current	柜面数量 Quantity of cabinet face
YFGZ2-20/220	20	220	5	60	2
YFGZ2-38/220	38	220	5	100	2
YFGZ2-50/220	50	220	8	120	2
YFGZ2-65/220	65	220	10	120	2
YFGZ2-100/220	100	220	10	240	2~3
YFGZ2-150/220	150	220	15	480	3~4
YFGZ2-200/220	200	220	20	480	3~4
YFGZ2-300/220	300	220	30	600	4~5
YFGZ2-20/110	20	220	5	600	2
YFGZ2-38/110	38	220	5	100	2
YFGZ2-50/110	50	220	8	120	2
YFGZ2-65/110	65	220	10	120	2
YFGZ2-100/110	100	220	10	240	2
YFGZ2-150/110	150	220	15	480	3~4
YFGZ2-200/110	200	220	20	480	3~4
YFGZ2-300/110	300	220	30	600	3~4

内部结构 Interior structure

