

## YFJP 型低压无功补偿配电装置

series product of low-voltage distributing cabinet



### 适用范围 Scope of application

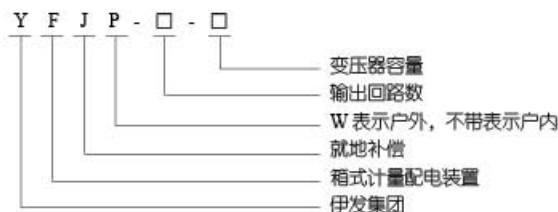
我公司根据国家电力部有关精神及农村电网无功补偿的若干文件,面向农网低压配电地区的发展方向,研制开发了 YFJP 型低压无功自动补偿配电柜系列产品。

YFJP 型低压无功补偿配电装置适用于交流 50Hz, 额定电压 0.4kV 以下的输配电系统。该系统产品融自动补偿和配电为一体,集漏电保护,电能计量、过流、过压、缺相保护等多功能为一体的新型户内外低压配电柜,该产品体积小、易安装、防窃电、成本低、适应强、耐老化、投运准确,无补偿误差等特点。具有防护等级高,保护性能完善,自动化程序高等优点,是理想的电网改造优选产品。该产品符合 IEC439《低压成套开关设备和控制设备》、GB7251.1-97《低压成套开关设备》等标准。

Our company researched and developed the YFJP series product of low-voltage distributing cabinet with powerless automatic compensation depending on the development direction facing the low-voltage distribution area of rural electrical power according to the related spirit and several documents about the powerless compensation of country electrical net issued by the national power ministry.

YFJP low-voltage distribution cabinet with powerless automatic compensation is applicable to the transmission and distribution system which is AC 50Hz and the rated current is below 0.4kV. This series of product is a new indoor and outdoor lower-voltage distributing cabinet integrating the automatic compensation and distribution as well as integrating multi functions such as the leakage protection, calculation of electrical energy, overcurrent, overvoltage and open-phase protection and so on. This product has the features such as small volume, easy installation, electric larceny protection, low cost, high adaptation, weathering proof accurate operation and no compensation error area and so on. It has the advantages such as high degree of protection, perfect protection performance and high automation degree and so on. It is a ideal product available for reconstruction of electrical network.

### 型号及其含义 Model description



### 工作原理 Operating principle

装置的计量用 DD862 型单相电度表或 DT862 型三相四线电度表及 0.5 级电流互感器; CJ20 型交流接触器作为电源总控制; 分路配电采用 RDM1 型塑料外壳式断路器; 由新型 RDJD2 型鉴相鉴幅无声运行漏电继电器控制 CJ20 型交流接触器有效地进行漏电和触电保护; JKL5C 型无功功率控制器监控并自动投切 BSMJ 型自愈式低压并联电容器进行无功补偿。

The metering of device is by means of the DD862 3-phase/4 wires watt-hour meter and class 0.5 current transformer. The CJ20 AC contactor is used as the total control for power supply. For the shunt distribution, the RDM1 plastic housing circuit breaker is used. The new RDJD2 phase demodulation & amplitude discrimination leakage relay with no noise operation controls the CJ20 AC contactor for effective leakage and electric shock protection. JKL5C powerless power controller monitors and switches on and off BSMJ self-recovery low-voltage parallel capacitor for powerless compensation.



### 使用环境条件 Environmental condition

1. 周围环境温度：不高于 +40℃，并且 24h 内其平均温度不高于 +35℃，不低于 -25℃
2. 海拔高度：≤ 2000 米
3. 安装倾斜度不超过 ±5°
4. 周围无剧烈振动，无腐蚀性气体和导电尘埃
5. 外壳防护等级：IP55

1. Ambient air temperature : ≤ +40℃ and the average temperature is not higher than +35℃ and not less than -25℃
2. Altitude: ≤ 2000M
3. Installation inclinayion does not excess to ± 5°
4. there is no severe vibration and corrosive gas as well as the conductive dust around the switch cabinet.
5. Protection degree of housing: IP55

### 产品性能 Performance of product

额定电压: AC400V 50Hz  
 额定容量: 20 ~ 250Kva  
 无功补偿容量: 4 ~ 60Kvar  
 漏电动作电流: ≤ 300mA  
 触电动作电流: ≤ 50mA  
 动作时间: ≤ 0.2S

Rated voltage: AC400V 50Hz  
 Rated capacity: 20-250kVA  
 Capacity of powerless compensation: 4-60KVAR  
 Leakage action current: ≤ 300mA  
 Electrical shock action current: ≤ 50mA  
 Action time: ≤ 0.2S

1. 一次方案图 (见图 1) Primary schematic diagram (see the figure 1)
2. 主电路方案及主要电器元件 Main circuit scheme & main electrical element

名称	型号规格	20kVA	30kVA	50kVA	80kVA	100kVA	150kVA	200kVA
进线总控制	CJ20	1/63A	1/100A	1/150A	1/225A	1/265A	1/400	1/500
出线开关	RDM1(DZ20, DZ47)	3/25A	3/40A	3/50A	3/80A	3/100A	3/150	3/200
交流接触器	CJ20	4	4	4	4	4	4	4
补偿容量	BSMJ(Kvar)	4	6	10	15	20	30	40
补偿器	JKL5C	-	-	-	-	-	1	1
避雷器	FYS-0.22	3	3	3	3	3	3	3
鉴相鉴幅漏电继电器	RDJD2	1	1	1	1	1	1	1

注：进线总控制、分路开关符号、补偿回路数、输出回路数均可由客户自定。手动时用 42L6-COS φ 替代 JKL5C.

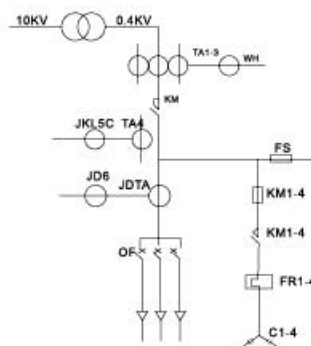


图 figure1