



### 概述 General

YFYBW 35KV 环保型组合式变电站是一种将电压开关设备、变压器、低压配电设备组装成一体成套性产品。它作为城市建筑、生活小区、中小型工厂、矿山油田等用电部门的变配电设备，具有成套性强、体积小结构紧凑、可靠性高、现场安装工作量小、安装高度周期短，以及可移等特点。适当改变其外形和颜色，使之与环境相适应，还可以起到美化环境的作用，是目前城乡土建变电站的替代产品和城网建设、改造的新型成套设备。



Combined type transformer substation is a kind of complete set product integrating voltage switch equipment and transformer with LV distribution equipment. It is usually applied to civic architectures, residential districts, mid-size and small-size factories, mine and oil fields, used as transformation and distribution equipment, with characteristics of strong completeness, compact structure, high reliability, low on-site workload, short installation period, movability, etc. In addition, its color and exterior can be changed appropriately to adapt to the surroundings and beautify the environment, it really is the ideal successor of current urban and rural civil engineering transformer substation, and also is a new type complete set equipment for urban network construction and reformation.

### 产品型号及含义 Product type and meaning

YF YB W □ - □ 35 / □



### 使用环境条件 Environmental condition

1. 海拔高度：不超过 1000 米；
  2. 环境温度：+40℃ -25℃；
  3. 相对湿度：日平均不超过 95%，月平均不超过 90%；
  4. 地震烈度：无经常性剧烈振动和冲击；
  5. 安装环境：户外、安装在无火灾、爆炸危险、无严重污秽、腐蚀性气体及粉尘、无剧烈冲击的场所；
- 注：超过以上条件时，可与我公司协商；

1. Altitude:  $\leq 1000\text{m}$ ;
  2. Ambient temperature: +40℃ -25℃ ;
  3. Relative humidity: Daily average  $\leq 95\%$ , monthly average  $\leq 90\%$ ;
  4. Abnormal severe vibration or impact;
  5. Environment for installation: Indoors, no fire or explosion danger, no corrosive gas or dust, no sharp impact.
- Note: Please negotiate with us if your product is used beyond the range of above conditions.

## YFYBW 35KV 环保型组合式变电站

Combined type transformer substation

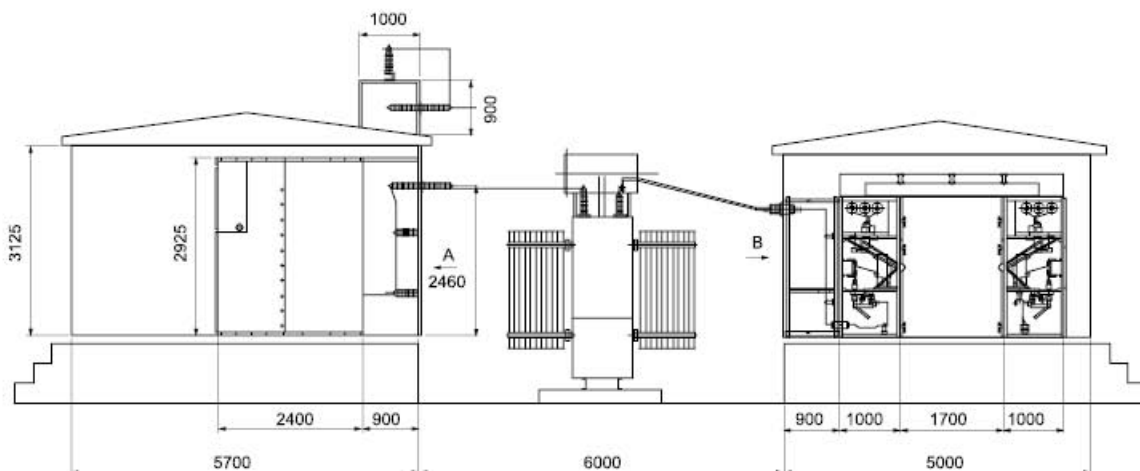


### 结构特点 Structure character

- 1、变电站由高压开关室、低压开关室、继电保护室和变压器室组成。高压开关室、低压开关室、继电保护室外壳可采用铝合金板、钢板或复合板制作。铝合金板表面经阳极氧化处理，增强了铝合金板的耐腐蚀性强度。钢板及钢结构件都经磷化处理，复合板具有色彩鲜艳美观并有绝热、阻燃等特点。变压器室不设封闭外壳构而置安全网罩，既有利于变压器通风散热，又能确保人身和设备安全。
  - 2、高压开关室 HV 高压开关室可装 JYNI-35、KYN10-35 开关柜或 35KV 负荷开关。35KV 进线和出线方式用户可自由选择架空式电缆方式。
  - 3、低压开关室 LV
    - a. 当低压侧为 10KV 时，低压开关室可安装 XGN2-10、KZNI-12、KYNI-12 开关柜，HXGNII-10F、HXGN26-10(F) 环网柜。
    - b. 当低压侧为 0.4KV 时，低压开关室（为节省空间一般不做低压开关柜）内安装 DW15T 系列、ME 系列、M 系列、F 系列框架式断路器或 DZ20 系列、CM 系列、H 系列、S 系列塑壳空气断路器。
  - 4、断电保护室 断电保护室内安装交流屏、直流屏、信号屏、保护屏、运动控制屏 (RTU) 载波机屏或光纤终端机。
- 注：根据用户要求本变电站可采用常规继电器保护，也可采用变电站微机综合自动化系统。
- 5、35KV 变电站平面、立面布置示意图见图。

- 1、This transformer substation is made up of HV switch compartment, LV switch compartment, relay protection compartment and transformer compartment. Enclosures of HV switch compartment, LV switch compartment and relay protection compartment can be made of aluminum alloy plate, steel plate or composite plate. Aluminum alloy plate is anodic oxidation treated to strengthen its corrosion stability. Steel plate and steel structured parts are all phosphating treated, and the composite plate is featured with vivid appearance, heat insulation and fire retardation. The transformer compartment is arranged with safeguard protecting net but not enclosed enclosure, which not only guarantees better thermal diffusivity, but also is able to insure person and equipment against accident.
  - 2、HV switch compartment The HV switch compartment can be mounted with JYNI-35, KYN10-35 switchgear or 35KV load switch. Aerial cable type is available for mounting 35KV inlet and outlet wire.
  - 3、LV switch compartment
    - a. When it is 10KV at LV side, the LV switch compartment can be mounted with XGN2-10, KZNI-12 and KYNI-12 switchgear, HXGNII-10F, HXGN26-10(F) Ring main unit
    - b. When it is 0.4KV at LV side, the LV switch compartment (no preparation of LV switchgear in consideration of space saving) can be mounted with DW15T series, ME series, M series and F series frame type circuit breaker as well as DZ20 series, CM series, H series and S series molded case air circuit breaker.
  - 4、Power-off protection compartment The power-off protection compartment is mounted with AC panel, DC panel, signal panel, protection panel, motion control panel (RTU), carrier wave machine panel or optical fiber termination set.
- Note: This transformer substation can adopt general relay protection, also microcomputer-based integrated automatic control system is available on request.
- 5、Refer to the diagram for plan layout and vertical plane layout of transformer substation of 35KV.

### 平面、立面布置示意图 Refer to the diagram for plan layout and vertical plane layout



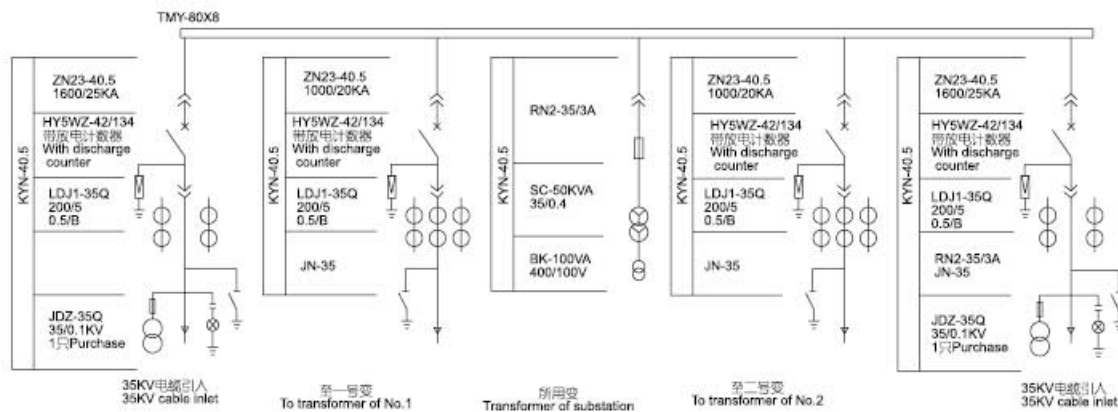


### 技术数据 Technical parameters

#### 变压器主要技术参数 Main technical parameters of transformer

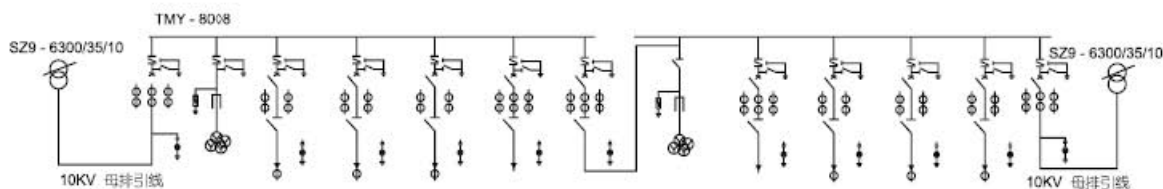
型号 Model	额定电压 (kV) Rated voltage	额定容量 (KVA) Rated capacity	变化 (KV/KV) Change
SZ7	35	400-20000	35/10, 35/6.3, 35/0.4
SZ9	35	400-20000	35/10, 35/6.3, 35/0.4

### 典型一次接线图 Typical primary connecton diagram



#### 35KV 侧一次单线图

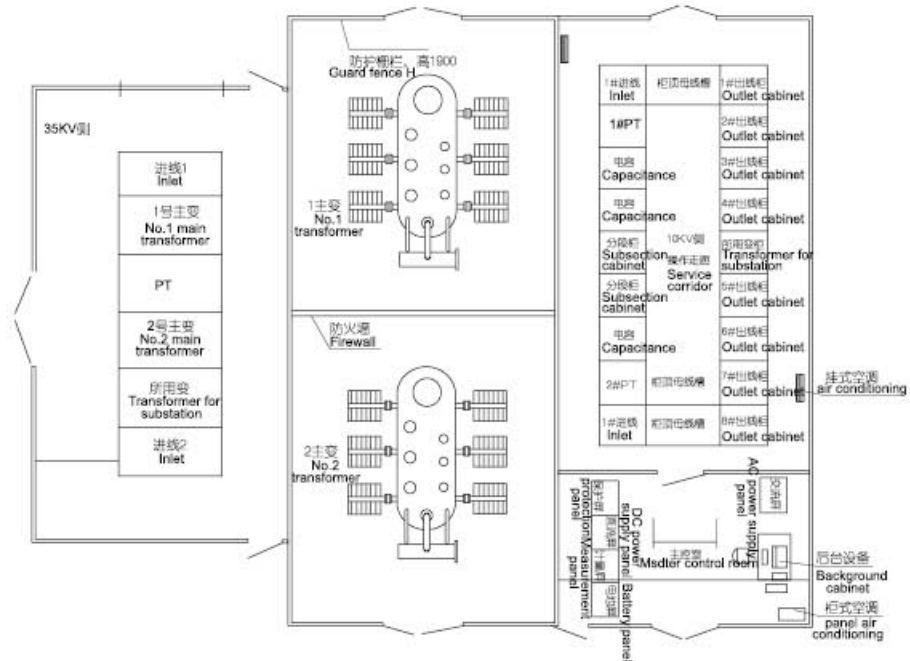
Primary single line diagram of 35KV side



用途 Application	1# 进线	1#PT	1# 进线	2# 出线	3# 备用 Standby	# 电容	分段	2#PT	2# 电容	4# 出线	5# 出线	6# 备用	2# 进线
柜型 Cabinet type	XGN66	XGN66	XGN66	XGN66	XGN66	XGN66	XGN66	XGN66	XGN66	XGN66	XGN66	XGN66	XGN66
隔离开关 Isolating switch	1000A	630A	630A	630A	630A	630A	1000A	630A	630A	630A	630A	630A	1000A
断路器 VS1-12	1250		630/	630/	630/	630/	1250/		630/	630/	630/	630/	1250/
Breaker	/31.5KA-1		20kA 1	20kA 1	20kA 1	20kA 1	31.5kA 1		20kA 1	20kA 1	20kA 1	20kA 1	31.5kA 1
电流互感器 LZJB-10	400/5,		400/5,200/5	300/5, 100/5	300/5, 100/5	100/5 0.2/	300/5, 100/5		100/5,	400/5,200	200/5,100	200/5,100	400/5,200
Current transformer	200/5,0.2 级		0.2 级	0.2 级	0.2 级	5 级	0.2 级		0.2 5 级	0.2 级	0.2 级	0.2 级	0.2 级
电压互感器 JDZJ-10		10/√3-0.1/√3						10/√3-0.1/√3					
Voltage transformer		-0.1/√3 -0.1/√3						-0.1/√3 -0.1/√3					
熔断器 RN2-10		3						3					
Fuse													
避雷器 HYSWZ-12.7/50	1	3	1					3	1				
Lightning arrester				1	1	1	1			1	1	1	1
带电显示器 GSN-10			1										
Electrification display				1	1								
零序互感器 LJ-100										1	1	1	1
Zero sequence transformer	装于主变保护屏上		1						1				
微机保护装置 Microcomputer protection device	Be moulded on protection scfoon of main transformer			1	1	1	1			1	1	1	装于主变保护屏上 Be moulded on protection scfoon of main transformer



平面布置图 Layout plan



### 安装 Mounting

- 1、本型组合式变电站只需在户外空地上浇钢筋混凝土基础即可。
- 2、变压器室 35KV 开关室、10KV 或 0.4KV 开关室都为单个的输出单元，在现场进行拼装联接；电源的引入与引出。
- 3、电源的引入与引出采用架空与电缆两种形式，用户可根据需要选择，订货时请注明。

- 1、This type of combined type transformer substation only requires reinforced concrete foundation outdoors.
- 2、Transformer compartment, 35KV switch compartment, 10KV or 0.4KV switch compartment are all individual output units, and are assembled on site; Inlet and outlet of power supply .
- 3、Inlet and outlet of power supply have overhead and cable two modes for selecting, please select according to requirements and give clear indication when placing the order.

### 运输及储存 Transportation and storage

组合变电站出厂迁移时，需分成几个运输单元进行运输，若装设 SF6 断路器，则应放气至零表压。  
本产品应储存于通风干燥，无腐蚀性气体的场所。

When the combined type transformer substation is moved away from the factory, it should be divided into several parts for transportation, if it has been equipped with SF6 circuit breaker, please discharge it to zero gauge pressure first.

This product should be stored in draughty areas free from corrosive gas.