

GFJZFW-24W3

# 24KV MULTI WINDINGS HIGH ACCURACY OUTDOOR POTENTIAL TRANSFORMER

GFJZFW-24W3 24KV high accuracy potential transformer are designed for metering and protection applications. This product has the characteristics of high efficiency and large capacity, and can be customized according to customer requirements. Applied for outdoor service; suitable for operating meters, instruments, relays and control devices.

The primary and secondary coils are wound using special winding and shielding techniques for improved voltage stress distribution. Each coil is carefully insulated with mylar film to provide a high dielectric medium between layers. The completed winding structure and double-loop cores are assembled to a support frame.

For insulation and protection, the assembly is cast in hydrophobic cycloaliphatic epoxy (HCEP) using automatic vacuum pressure. The HCEP material offers superior arc track, ozone, and ultraviolet-resistive properties while maintaining physical strength. The hydrophobic surface properties of HCEP ensure highly reliable performance in wet, humid, or polluted environments.

It can be used for 24KV distribution line, Coal mine, power plant, Rail way, factories... Strictly Comply IEC60044-2; IEC 61869-1,3; ANSI/IEEE C57.13.

#### **Features**

- 1. Weight: 65KG;
- 2. Using life: 30 years;
- 3. Material:Epoxy(HCEP);
- 4. Rated voltages up to 24 kV;
- 5. 15KV 17KV 20KV 24KV Outdoor;
- 6. Accuracy class: 0.2 0.5 1 3 3P 6P;
- 7. Limiting Therminal Output(VA): 500VA;
- 8. Reasonable structure and robust construction;
- 9. Rated basic insulation levels (BIL) up to 125 kV;
- 10. Standard & Special High Accuracy metering classes;
- 11. Rated Voltage Ratio(KV) 20/0.22/0.22 or 20/0.1/0.1;
- 12. Excellent short circuit and thermal withstand capabilities;
- 13. IEC60044-2, IEC 61869-1,3 & ANSI/IEEE C57.13 Standards;
- 14. Convenient installation, suitable for installation in any location;



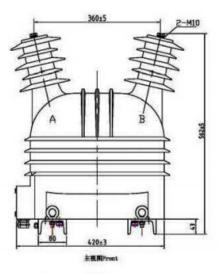


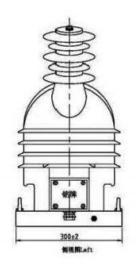


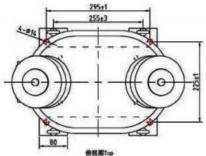
## **Appliations**

- 1. Rail way;
- 4. Energy meter;
- 7. Oil, gas company;
- 10. Measuring instrument;
- 13. Electric Power Bureau;
- 2. Coal Mine;
- 5. Power Meter;
- 8. Distribution system;
- 11. Primary metering cabinets;
- 14. Substation metering and relaying;
- 3. Power plant;
- 6. Power station;
- 9. MV Power Quality Analyzer;
- 12. Industrial and mining enterprises;

## **Outline drawing**







## **Parameters**

| Technical parameters  |  |
|-----------------------|--|
| Standards             | IEC60044-2; IEC 61869-1,3; ANSI/IEEE C57.13; GB20840-1,3 |
| Rated primary voltage | 24KV, 20KV, 17KV, 15KV                                   |
| Rated load            | ≤100VA   |
| Rated frequency       | 50Hz or 60Hz   |



#### **Parameters**

| Rated secondary voltage(KV) | $0.1, 0.1/\sqrt{3}, 0.1/3, 0.11, 0.12, 0.22, 0.38$  |
|-----------------------------|---|
| Cosø                        | 0.8 (lag)   |
| Phase number                | single phase  |
| Class                       | 0.2, 0.5, 1, 3, 3P, 6P                              |
| Windings                    | single, double, three windings                      |
| Rated insulation level      | 24/65/125KV   |
| Installation                | outdoor   |
| Surface creepage distance   | 562mm   |
| Application                 | Measurement and Protection                          |
| Class of pollution          | IV  |
| Mechanical parameters       |   |
| Material                    | Epoxy resin + silicone sleeve                       |
| Weight (kg)                 | 65  |
| Operating conditions        |   |
| Operating temperature       | -25°C to +55°C                                      |
| Daily average temp          | <+40°C  |
| Storage temperature         | -40°C to +70°C                                      |
| Altitude                    | <3000 meters  |
| Condition                   | No existence of severely begrimed, erosive and      |
|                             | radioactive gas in the air. Permission of long-term |
|                             | operation under rated current.                      |

# **Technical Data**

| Rated<br>Voltage(KV) | Rated Voltage radio            | Rated<br>frequency(Hz) | Accuracy class or accuracy class conbination | Rated output | Thermal<br>limiting output<br>(VA) |
|----------------------|--------------------------------|------------------------|--|--------------|------------------------------------|
| 20                   | 20/0.1                         | 50,60                  | 0.2  | 45           | 500                                |
|                      |                                |                        | 0.5  | 100          | 500                                |
|                      | 20/0.1/0.1                     | 50,60                  | 0.2/0.5                                      | 30/30        | 300                                |
|                      |                                |                        | 0.5/0.5                                      | 75/75        | 300                                |
|                      | 20/ √ 3:0.1/ √ 3:0.1/3         | 50,60                  | 0.2/6P(3P)                                   | 30/100       | 400                                |
|                      |                                |                        | 0.5/6P(3P)                                   | 50/100       | 400                                |
|                      | 20/ √ 3:0.1/ √ 3:0.1 √ 3:0.1/3 | 50,60                  | 0.2/0.5/6P(3P)                               | 15/20/100    | 300                                |
|                      |                                |                        | 0.5/0.5/6P(3P)                               | 30/50/100    | 300                                |