

## GFLZZW3-35Q

### OUTDOOR MULTI WINDINGS DRY TYPE 33KV CURRENT TRANSFORMER

This model GFLZZW3-35Q outdoor dry type current transformer is used in 36KV, 35KV, 33KV, 27KV, 25KV power system, for measuring and protection. It has been used in outdoor pole mounted and transmission line. This product has the characteristics of high efficiency and large capacity, and can be customized according to customer requirements.

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. Primary and secondary use pure electrolytic copper, both winding and core have high voltage shielding processing. The hydrophobic surface properties of HCEP ensure highly reliable performance in wet, humid, or polluted environments.

It can be used for less than 36KV distribution line, Coal mine, power plant, Rail way, factories.. . The 33kV current transformers are strictly in conformity with IEC60044, IEC 61869, ANSI/IEEE C57.13, NBR6855 etc. It has been used many substations and wind power plants.

### Features

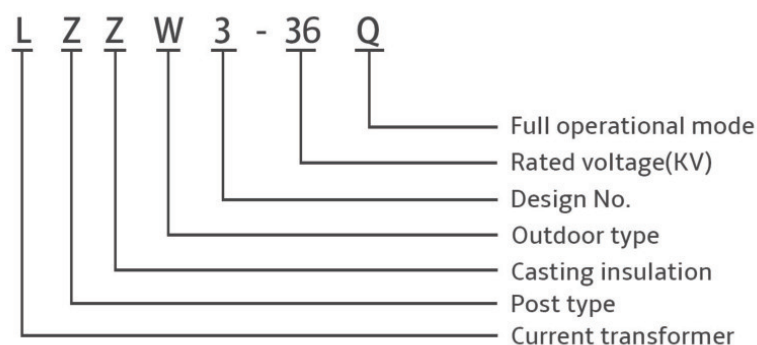
1. Weight: 90KG;
2. Using life: 30 years;
3. Rated voltages up to 36 kV;
4. Secondary current output 5A or 1A;
5. Tin plated copper primary terminals;
6. 36KV, 35KV, 33KV, 27KV, 25KV Outdoor;
7. Multi windings post type outdoor design;
8. Reasonable structure and robust construction;
9. Rated basic insulation levels (BIL) up to 200 kV;
10. Material:Epoxy(HCEP) + outdoor silicone cover;
11. Surface creepage distance more than 1300mm;
12. Standard & Special High Accuracy metering classes;
13. Convenient installation, suitable for installation in any location;
14. Accuracy class: 0.2S 0.2, 0.5S, 0.5, 1, 5P20, 5P10, 10P20, 10P15;
15. IEC60044-1, IEC 61869-2, GB/T 20840.1,2 & ANSI/IEEE C57.13 Standards;



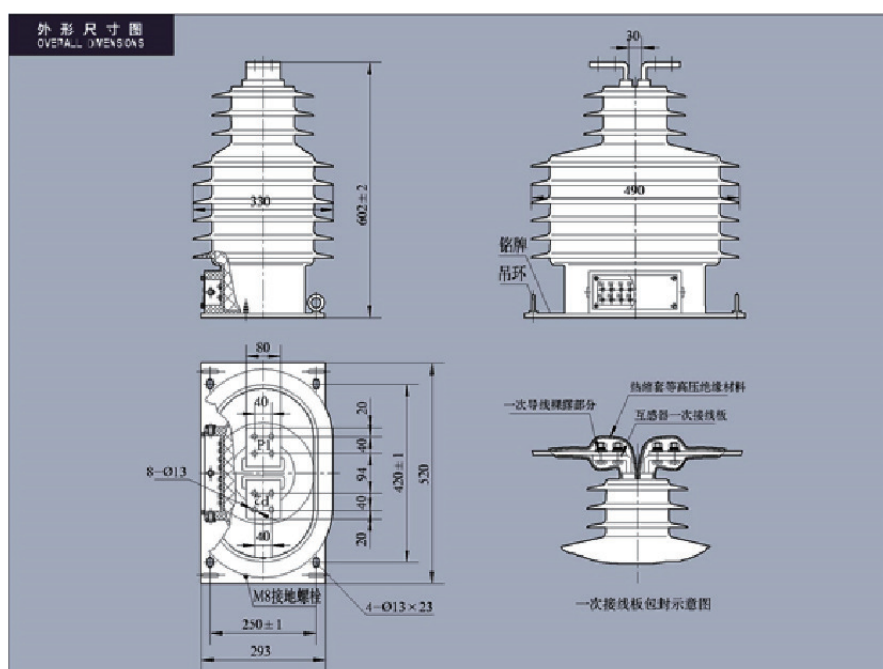
## Applications

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

## Type Designation



## Outline drawing



## Parameters

| Technical parameters             |                                                                                                                                   |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Standards                        | IEC60044; IEC 61869; ANSI/IEEE C57.13, GB/T 20840.1,2                                                                             |
| Accuracy Class                   | 0.2s, 0.2, 0.5s, 0.5, 1, 10P10, 10P15, 5P20, 5P10                                                                                 |
| Rated Voltage                    | 36KV, 35KV, 33KV, 27KV, 25KV                                                                                                      |
| Rated primary current            | 20-2000A                                                                                                                          |
| Rated load                       | ≤30VA                                                                                                                             |
| Rated frequency                  | 50Hz or 60Hz                                                                                                                      |
| Rated secondary current          | 5A or 1A                                                                                                                          |
| Rated short-time thermal current | 80kA, 1S                                                                                                                          |
| Rated dynamic current            | 160kA                                                                                                                             |
| Rated insulation level           | 40.5/95/200KV                                                                                                                     |
| Using type                       | Outdoor                                                                                                                           |
| Application                      | Measurement and Protection                                                                                                        |
| Insulation class                 | E                                                                                                                                 |
| FS                               | ≤10                                                                                                                               |
| Surface creepage distance (mm)   | 1300                                                                                                                              |
| Mechanical parameters            |                                                                                                                                   |
| Material                         | Epoxy resin+silicone sleeve                                                                                                       |
| Weight (kg)                      | 90                                                                                                                                |
| 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 1: two windings

| Rated primary current(A) | Accuracy class combination | Rated secondary output(VA) |     |      |      |      | Surface creepage distance (mm) | Weight (KG) |
|--------------------------|----------------------------|----------------------------|-----|------|------|------|--------------------------------|-------------|
|                          | 1S/2S                      | 0.2(S)0.5S                 | 0.5 | 5P10 | 5P15 | 5P20 |                                |             |
| 10-630                   | 0.2(S)/0.5(S)              | 10                         | 20  | 100  | 60   | 40   | 1300                           | 90          |
| 750-2000                 | 0.2(S)/5p<br>0.5(S)/5p     |                            |     | 120  | 75   | 50   |                                |             |

## Technical data 2: three windings

| Rated primary current(A) | Accuracy class combination   | Rated secondary output(VA) |     |      |      |      | Surface creepage distance (mm) | Weight (KG) |
|--------------------------|------------------------------|----------------------------|-----|------|------|------|--------------------------------|-------------|
|                          | 1S/2S/3S                     | 0.2(S)0.5S                 | 0.5 | 5P10 | 5P15 | 5P20 |                                |             |
| 10-500                   | 0.2(S)/0.2(S)/5P             | 10                         | 20  | 50   | 30   | 25   | 1300                           | 90          |
| 600-1000                 | 0.2(S)/0.5(S)/5p             |                            |     | 80   | 50   | 30   |                                |             |
| 1200-2000                | 0.5(S)/0.5(S)5p              |                            |     | 100  | 60   | 40   |                                |             |
| 100-630                  | 0.2(S)/5p/5p<br>0.5(S)/5p/5p | 10                         | 20  | 30   | 20   | 15   |                                |             |
| 750-1000                 |                              |                            |     | 50   | 30   | 20   |                                |             |
| 1200-1600                |                              |                            |     | 60   | 30   | 25   |                                |             |
| 2000                     |                              |                            |     | 60   | 40   | 25   |                                |             |

## Technical data 3: four windings singls transformaiton radio

| Rated primary current(A) | Accuracy class combination | Rated secondary output(VA) |     |      |      |      | Surface creepage distance (mm) | Weight (KG) |
|--------------------------|----------------------------|----------------------------|-----|------|------|------|--------------------------------|-------------|
|                          | 1S/2S/3S/4S                | 0.2(S)0.5S                 | 0.5 | 5P10 | 5P15 | 5P20 |                                |             |
| 10-800                   | 0.2(S)/0.2(S)/5P/5P        | 10                         | 20  | 25   | 15   | 10   | 1300                           | 90          |
| 1000                     | 0.2(S)/0.5(S)/5p/5P        |                            |     | 30   | 20   | 10   |                                |             |
| 1200-2000                | 0.5(S)/0.5(S)5p/5P         |                            |     | 40   | 25   | 15   |                                |             |

## Technical data 4: three windings singls transformaiton radio

| Rated primary current(A) | Accuracy class combination                                       | Rated secondary output(VA) |     |      |      |      | Surface creepage distance (mm) | Weight (KG) |
|--------------------------|------------------------------------------------------------------|----------------------------|-----|------|------|------|--------------------------------|-------------|
|                          | 1S/2S/3S/4S                                                      | 0.2(S)0.5S                 | 0.5 | 5P10 | 5P15 | 5P20 |                                |             |
| 10-15-20                 | 0.2(S)/0.2(S)/5P/5P<br>0.2(S)/0.5(S)/5p/5P<br>0.5(S)/0.5(S)5p/5P | 10                         | 20  | 25   | 15   | 10   | 1300                           | 90          |
| 15-20-30                 |                                                                  |                            |     |      |      |      |                                |             |
| 20-30-40                 |                                                                  |                            |     |      |      |      |                                |             |
| 30-40-50                 |                                                                  |                            |     |      |      |      |                                |             |
| 40-50-75                 |                                                                  |                            |     |      |      |      |                                |             |
| 50-75-100                |                                                                  |                            |     |      |      |      |                                |             |
| 75-100-150               |                                                                  |                            |     |      |      |      |                                |             |
| 100-150-200              |                                                                  |                            |     |      |      |      |                                |             |
| 150-200-300              |                                                                  |                            |     |      |      |      |                                |             |
| 200-300-400              |                                                                  |                            |     |      |      |      |                                |             |
| 300-400-500              |                                                                  |                            |     |      |      |      |                                |             |
| 400-500-600              |                                                                  |                            |     |      |      |      |                                |             |
| 500-600-800              |                                                                  |                            |     |      |      |      |                                |             |
| 600-800-1200             |                                                                  |                            |     |      |      |      |                                |             |
| 800-1200-1500            |                                                                  |                            |     |      |      |      |                                |             |
| 1200-1500-2000           |                                                                  |                            |     |      |      |      |                                |             |

## Technical data 5: Idyn

| Rated primary current(A)    |                             | Ith/Is(KA r.m.s.) | Idyn(KA peak) |
|-----------------------------|-----------------------------|-------------------|---------------|
| Double transformaiton ratio | Single transformaiton ratio |                   |               |
| 10-15-20                    | 10                          | 2                 | 5             |
| 15-20-30                    | 15                          | 3                 | 7.5           |
| 20-30-40                    | 20,25                       | 4                 | 10            |
| 30-40-50                    | 30                          | 6.3               | 15.7          |
| 40-50-75                    | 40                          | 9.4               | 23.6          |
| 50-75-100                   | 50                          | 12.6              | 31.5          |

## Technical data 5: Idyn - continued

| Rated primary current(A)   |                            | Ith/Is(KA r.m.s.) | Idyn(KA peak) |
|----------------------------|----------------------------|-------------------|---------------|
| Double transformaion ratio | Single transformaion ratio |                   |               |
| 75-100-150                 | 75                         | 15.7              | 39            |
| 100-150-200                | 100                        | 22                | 55            |
| 150-200-300                | 150                        | 31.5              | 78.7          |
| 200-300-400                | 200,250                    | 47                | 118           |
| 300-400-500                | 300                        | 63                | 157.5         |
| 400-500-600                | 400                        | 63                | 157.5         |
| 500-600-800                | 500                        | 80                | 200           |
| 600-800-1200               | 600-1200                   | 80                | 200           |
| 800-1200-1500              | 1500-2000                  | 140               | 200           |
| 1200-1500-2000             |                            |                   |               |