

# TRANSFORMER SOLUTIONS

Power • Distribution • Dry-Type • New Energy • Special Applications

Comprehensive transformer solutions for utility, commercial, industrial and specialized electrical applications.

PROJECT  
SUPPORT

TECHNICAL  
EXPERTISE

QUALITY  
PRODUCTS

PROFESSIONAL  
INSTALLATION

AFTER-SALES  
SERVICE

MAINTENANCE &  
SUPPORT

# YOUR REQUIREMENTS. OUR SOLUTION.

Every project has different electrical requirements.

Tell us what you need, and SOFAB will help you identify the right transformer solution for your application.

01

## POWER TRANSFORMER

High-voltage transmission and substation transition and substation applications with advanced technology and high reliability performance.

**IDENTIFY YOUR APPLICATION**

02

## OIL-IMMERSED DISTRIBUTION TRANSFORMER

Reliable oil-immersed distribution transformers for medium/high-voltage systems, featuring superior insulation and long service life.

**DEFINE YOUR REQUIREMENTS**

03

## DRY-TYPE TRANSFORMER

Oil-free, low-maintenance transformers ideal for indoor, safety-sensitive environments with excellent fire resistance and efficiency.

**SELECT THE RIGHT TRANSFORMER**

04

## NEW ENERGY TRANSFORMER

Transformers designed for renewable energy applications including solar, wind, and energy storage systems with optimized performance.

**LET SOFAB SUPPORT YOU**

05

## SPECIAL TRANSFORMER

Special purpose transformers for industrial, mining, rectifier, furnace, grounding, and other demanding applications.

06

## EXPORT TRANSFORMER (CUSTOMIZABLE)

Customizable transformer solutions including pad-mounted and pole-mounted units to meet international standards and project requirements.

**The right transformer starts with the right requirements**

# UNDERSTANDING OUR TRANSFORMER RANGE



Over 50 Years of Excellence  
in Security Solutions

## A Simple Guide to Choosing the Right Transformer

Transformers perform the same basic function-transferring electrical power from one voltage level to another-but they are designed differently depending on the application, installation environment, capacity, voltage level, and system requirements.

### 01 | POWER TRANSFORMER

For High-Voltage Power Systems

**What it does:**

Power transformers are designed for **high-voltage transmission and substation applications**.

**What makes it different?**

- Designed for **high voltage and large power capacities**.
- Available in different winding configurations, including **double-winding and three-winding** arrangements.
- Can be configured with different voltage regulation methods, depending on the system requirements.
- Typically used where large amounts of electrical power need to be transferred between major voltage levels.

**Typical applications:**

**Power Plants • Substations • Transmission Networks • Large Industrial Facilities**

**Power Transformer = Built for the Main Power Network**

### 02 | OIL-IMMERSED DISTRIBUTION TRANSFORMER

For Reliable Power Distribution

**What it does:**

Oil-immersed distribution transformers are designed primarily for **distribution networks**, where electrical power needs to be transformed for downstream users and equipment.

**Why is it "oil-immersed"?**

The transformer's active components are immersed in **insulating transformer oil**, which helps provide electrical insulation and assists with heat transfer/cooling.

**What makes it different?**

- Oil provides **insulation and cooling**.
- Well suited for outdoor and distribution applications.
- Available in different voltage and capacity configurations.
- The supplier range includes **66kV three-phase double-winding on-load voltage-regulating configurations**.

**Typical applications:**

**Distribution Substations • Industrial Facilities • Commercial Infrastructure • Utility Networks**

**Oil-Immersed = Oil Provides Insulation + Cooling**

### 03 | DRY-TYPE TRANSFORMER

For Oil-Free Applications

**What it does:**

Dry-type transformers perform the same basic voltage transformation function as oil-immersed transformers, but they use **air/solid insulation systems instead of being immersed in transformer oil**.

**What makes it different?**

- **No transformer oil** is used as the primary insulating medium.
- Often preferred where oil-free construction and fire-safety considerations are important.
- Particularly suitable for **indoor installations** and locations where maintenance and environmental considerations are important.
- The supplied catalogue includes dry-type power, distribution, amorphous-alloy, H-class, and three-dimensional-core configurations.

**Typical applications:**

**Commercial Buildings • Industrial Facilities • Hospitals • Transportation Facilities • Indoor Electrical Rooms**

**Dry-Type = No Transformer Oil**

### 04 | NEW ENERGY TRANSFORMER

For Renewable Energy Systems

**What it does:**

New energy transformers are designed for **modern renewable-energy and power-conversion systems**.

**What makes it different?**

- Developed for applications where power is generated from **renewable sources**.
- The catalogue specifically identifies **photovoltaic, wind-power, and energy-storage** applications.
- Electrical configuration can be adapted to the requirements of the renewable-energy system.

**Typical applications:**

**Solar PV • Wind Power • Energy Storage • Renewable Energy Plants**

**New Energy Transformer = Designed Around Renewable Power**

### 05 | SPECIAL TRANSFORMER

For Specific Industrial Requirements

**What it does:**

Special transformers are designed for applications where a standard power or distribution transformer may not be sufficient.

This category includes solutions such as:

- **Mine Transformer** → for mining applications
- **Buried Transformer** → for specialized below-grade installations
- **Phase-Shifting Rectifier Transformer** → for rectifier/frequency-converter systems
- **Electric Furnace Transformer** → for industrial furnace applications
- **Grounding Transformer** → for creating an artificial neutral point
- **Three-Phase Dry Isolation Transformer** → for electrical isolation and specialized equipment

These applications are explicitly represented in the product range.

**Special Transformer = Built Around the Application**

### 06 | EXPORT TRANSFORMER

Customizable for Project Requirements

**What it does:**

This category covers transformer configurations intended to be **customized according to project requirements**, including pad-mounted and pole-mounted solutions.

**What makes it different?**

- Configuration can be adapted to the required **voltage, capacity, installation method, and system requirements**.
- Includes **three-phase pad-mounted, single-phase pad-mounted, and single-phase pole-mounted** transformers.
- Particularly useful when the project has specific installation or distribution requirements.



# A QUICK GUIDE TO TRANSFORMER SELECTION



Over 50 Years of Excellence  
in Security Solutions

Before reviewing the technical specifications, it is helpful to understand a few basic transformer configurations and terms.

## UNDERSTANDING TRANSFORMER CONFIGURATION.

### A Simple Guide to Selecting the Right Transformer

**Not all transformers are designed for the same purpose.**

The right transformer depends on the required capacity, voltage level, phase system, number of windings, voltage regulation requirements, installation conditions, and the characteristics of the electrical system.

| TOPIC                            | WHAT IT MEANS                                                                                                                                                                 | KEY POINT / AHA MOMENT                                                   |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| kVA / MVA – Transformer Capacity | Indicates the transformer's apparent power capacity. Higher-rated transformers are generally required as the electrical load increases.                                       | Higher Load → Higher Required Capacity                                   |
| Single-Phase vs. Three-Phase     | Single-Phase: commonly used for single-phase distribution and localized loads. Three-Phase: commonly used for commercial, industrial, utility, and larger electrical systems. | Match the transformer phase to the electrical system.                    |
| Double-Winding                   | One HV winding and one LV winding, typically used to connect two main voltage levels.                                                                                         | Double-Winding → 2 Main Voltage Levels                                   |
| Three-Winding                    | One HV, one MV, and one LV winding, allowing three voltage levels to be interconnected through one transformer.                                                               | Three-Winding → 3 Voltage Levels                                         |
| On-Load Voltage Regulation       | Allows tap adjustment while the transformer is energized and carrying load.                                                                                                   | ON-LOAD → Adjust During Operation                                        |
| Unexcited Voltage Regulation     | Tap adjustment is performed while the transformer is de-energized.                                                                                                            | UNEXCITED → Adjust When De-Energized                                     |
| Rated HV / LV                    | Defines the high-voltage and low-voltage sides of the transformer.                                                                                                            | Always check both voltage levels before selecting a transformer.         |
| Tapping Range                    | Indicates the available tap positions or voltage adjustment range of the transformer.                                                                                         | Helps match the transformer to the required system voltage.              |
| Vector Group                     | Identifies the winding connection and phase relationship between transformer windings.                                                                                        | Important for system compatibility and transformer connection.           |
| Impedance Voltage (%)            | Indicates the transformer's impedance characteristic and is an important parameter in system and fault calculations.                                                          | A key parameter for system performance and short-circuit considerations. |
| No-Load Loss                     | Power loss associated mainly with the transformer core when energized without load.                                                                                           | Lower losses can contribute to better operating efficiency.              |
| On-Load Loss                     | Power loss that occurs while the transformer is supplying electrical load.                                                                                                    | Load-dependent loss increases with transformer loading.                  |

### TRANSFORMER CAPACITY

Higher Load → Higher Required Capacity

### PHASE CONFIGURATION

Single-Phase → Localized Loads

Three-Phase → Larger Electrical Systems

### WINDING CONFIGURATION

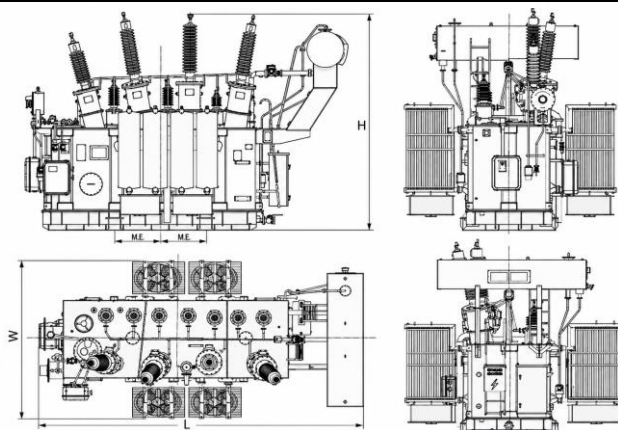
Double-Winding → 2 Voltage Levels

Three-Winding → 3 Voltage Levels

### VOLTAGE REGULATION

ON-LOAD → Adjust While Operating

UNEXCITED → Adjust When De-Energized



**IMPORTANT:** The right transformer is not determined by capacity alone. Voltage, phase configuration, winding arrangement, regulation method, installation conditions, cooling, losses, protection, accessories, applicable standards, and other project requirements must also be considered.



# PRODUCT OVERVIEW

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 01 POWER TRASFORMER

High-voltage transformer and substation transition and substation applications with advanced technology and high reliability performance

# SO FAB

TRUSTED POWER SOLUTIONS.  
DELIVERING RELIABILITY.

### KEY ADVANTAGES

- Advanced optimized design
- Compact and lightweight construction
- Low losses and low partial discharge
- Low operating noise
- Reliable and stable performance
- Energy-efficient and environmentally friendly
- Easy installation and maintenance
- Suitable for power plants, substations, and large industrial & petrochemical facilities

## 01 POWER TRANSFORMER

### ELECTRICAL POWER TRANSFORMER

Engineered for performance.  
Built for reliability.

SOFAB Power Transformers are designed and manufactured to deliver safe, efficient and continuous power for a wide range of applications.



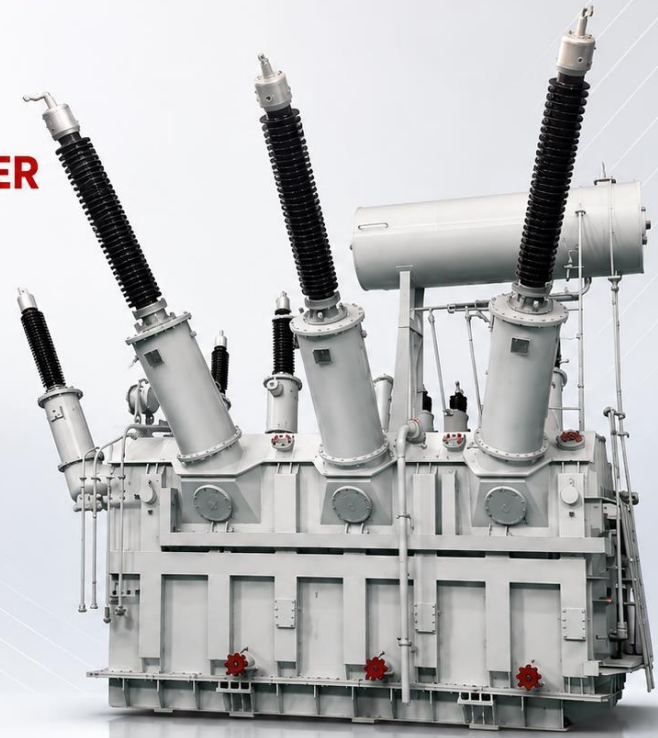
**HIGH RELIABILITY**  
Designed for stable operation and long service life.



**ENERGY EFFICIENT**  
Low no-load and load losses for better efficiency.



**BUILT TO PERFORM**  
Advanced technology and premium materials for maximum performance.



**SAFE & RELIABLE**  
Compliant with IEC, IEEE and other international standards.



**ADVANCED TECHNOLOGY**  
High quality insulation system and superior cooling design.



**LOW MAINTENANCE**  
Robust construction for reduced maintenance.



**ENVIRONMENT FRIENDLY**  
Designed for low noise and low environmental impact.

### TECHNICAL FEATURES & PERFORMANCE

**SO FAB Power Transformers** are engineered using advanced design, calculation, and validation procedures covering the transformer core, windings, structural components, leads, and tank assembly. Each major component is optimized and subjected to comprehensive validation to ensure reliable product performance.

**Advanced manufacturing processes**, careful material selection, and precision engineering contribute to a transformer design characterized by compact construction, reduced weight, low losses, low partial discharge, and low noise. These features support energy efficiency, environmental responsibility, ease of installation and maintenance, reliable operation, and reduced lifecycle operating costs.

Selected transformer models, including **SSZ20-240000/220**, have successfully **passed short-circuit withstand capability testing** and routine/type tests conducted by the National Transformer Quality Supervision and Inspection Center, as stated in the supplier's technical documentation.

SOFAB Power Transformers provide a **stable, reliable, economical**, and environmentally responsible power solution for a wide range of applications, including power plants, substations, large industrial facilities, mining operations, and petrochemical enterprises.

SO FAB TRUST MIDDLE EAST | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia  
T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [Sales@sofab.cc](mailto:Sales@sofab.cc)



# TECHNICAL DATA



Over 50 Years of Excellence  
in Security Solutions

## 01 POWER TRASFORMER

High-voltage transformer and substation transition and substation applications with advanced technology and high reliability performance

### 500kV Oil-Immersed Single-Phase Double-Winding Unexcited Voltage Regulating Power Transformer

| Rated Capacity (MVA) | Rated Voltage HV and Tapping Range |               |                   |              | No Load Current (%) | Short-Circuit Impedance | No Load Loss (kW) | On Load Loss (kW) |
|----------------------|------------------------------------|---------------|-------------------|--------------|---------------------|-------------------------|-------------------|-------------------|
|                      | Rated HV                           | Tapping Range | Rated LV          | Vector Group |                     |                         |                   |                   |
| 100                  | 500/√3                             | ±2×2.5        | 13.8, 15.75       | IO           | 0.16                | 14                      | 34                | 203               |
| 120                  | 500/√3                             | ±2×2.5        | 15.75, 18, 20     | IO           | 0.16                | 14                      | 39                | 234               |
| 200                  | 500/√3                             | ±2×2.5        | 15.75, 18, 20, 24 | IO           | 0.12                | 14                      | 63                | 342               |
| 223                  | 500/√3                             | ±2×2.5        | 18                | IO           | 0.12                | 14                      | 68                | 371               |
| 240                  | 500/√3                             | ±2×2.5        | 18, 20, 24        | IO           | 0.12                | 14                      | 72                | 392               |
| 260                  | 500/√3                             | ±2×2.5        | 18, 20            | IO           | 0.12                | 14                      | 77                | 414               |
| 380                  | 500/√3                             | ±2×2.5        | 24, 27            | IO           | 0.12                | 14                      | 102               | 549               |
| 400                  | 500/√3                             | ±2×2.5        | 24, 27            | IO           | 0.12                | 14                      | 106               | 570               |
| 410                  | 500/√3                             | ±2×2.5        | 24, 27            | IO           | 0.12                | 14                      | 108               | 581               |
| 484                  | 500/√3                             | ±2×2.5        | 24, 27            | IO           | 0.12                | 14                      | 123               | 657               |

### 500kV Oil-Immersed Three-Phase Double-Winding Unexcited Voltage Regulating Power Transformer

| Rated Capacity (MVA) | Rated Voltage HV and Tapping Range |               |                   |              | No Load Current (%) | Short-Circuit Impedance | No Load Loss (kW) | On Load Loss (kW) |
|----------------------|------------------------------------|---------------|-------------------|--------------|---------------------|-------------------------|-------------------|-------------------|
|                      | Rated HV                           | Tapping Range | Rated LV          | Vector Group |                     |                         |                   |                   |
| 120                  | 500/√3                             | ±2×2.5        | 13.8, 15.75       | YNd11        | 0.20                | 14                      | 41                | 356               |
| 160                  |                                    |               | 13.8, 15.75       |              | 0.16                | 14                      | 50                | 441               |
| 240                  |                                    |               | 13.8, 15.75       |              | 0.16                | 14                      | 69                | 599               |
| 300                  |                                    |               | 13.8, 15.75, 18   |              | 0.16                | 14                      | 80                | 707               |
| 370                  | 500/525/550/√3                     |               | 15.75, 18, 20     |              | 0.12                | 14                      | 94                | 810               |
| 400                  |                                    |               | 18, 20, 24        |              | 0.12                | 14                      | 96                | 855               |
| 420                  |                                    |               | 15.75, 18, 20     |              | 0.12                | 14                      | 102               | 860               |
| 480                  |                                    |               | 15.75, 18, 20     |              | 0.12                | 14                      | 110               | 954               |
| 600                  |                                    |               | 15.75, 18, 20, 24 |              | 0.12                | 16 (or) 18              | 143               | 1202              |
| 720                  |                                    |               | 18, 20, 24        |              | 0.08                |                         | 168               | 1382              |
| 750                  |                                    |               | 20, 22            |              |                     |                         | 173               | 1422              |
| 780                  |                                    |               | 22                |              |                     |                         | 176               | 1467              |
| 860                  |                                    |               | 22                |              |                     |                         | 190               | 1575              |
| 1140                 |                                    |               | 27                |              |                     |                         | 237               | 1949              |
| 1170                 |                                    |               | 27                |              |                     |                         | 242               | 1980              |



# TECHNICAL DATA

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 01 POWER TRASFORMER

High-voltage transformer and substation transition and substation applications with advanced technology and high reliability performance

### 330kV Oil-Immersed Three-Phase Double-Winding Unexcited Voltage Regulating Power Transformer

| Rated Capacity (MVA) | Rated Voltage HV and Tapping Range |               |          |              | No Load Current (%) | Short-Circuit Impedance | No Load Loss (kW) | On Load Loss (kW) |
|----------------------|------------------------------------|---------------|----------|--------------|---------------------|-------------------------|-------------------|-------------------|
|                      | Rated HV                           | Tapping Range | Rated LV | Vector Group |                     |                         |                   |                   |
| 90000                | 345 / 363                          | ±2×2.5        | 10.5     | YNd11        | 0.35                | 14~15                   | 37                | 247               |
| 120000               |                                    |               | 13.8     |              | 0.35                |                         | 47                | 306               |
| 150000               |                                    |               | 15.75    |              | 0.33                |                         | 56                | 362               |
| 180000               |                                    |               | 18       |              | 0.30                |                         | 64                | 415               |
| 240000               |                                    |               | 15.75    |              | 0.27                |                         | 80                | 515               |
| 360000               |                                    |               | 18       |              | 0.27                |                         | 109               | 722               |
| 370000               |                                    |               | 20       |              | 0.24                |                         | 111               | 736               |
| 400000               |                                    |               | —        |              | 0.24                |                         | 118               | 780               |
| 720000               |                                    |               | —        |              | 0.16                |                         | 183               | 1212              |

### 220kV Oil-Immersed Three-Phase Double-Winding Unexcited Voltage Regulating Power Transformer

| Rated Capacity (MVA) | Rated Voltage HV and Tapping Range |               |            |              | No Load Current (%) | Short-Circuit Impedance | No Load Loss (kW) | On Load Loss (kW) |
|----------------------|------------------------------------|---------------|------------|--------------|---------------------|-------------------------|-------------------|-------------------|
|                      | Rated HV                           | Tapping Range | Rated LV   | Vector Group |                     |                         |                   |                   |
| 31500                | 220 / 242                          | ±2×2.5        | 6.3, 6.6   | YNd11        | 0.45                | 12~14                   | 15                | 115               |
| 40000                |                                    |               | 6.3, 6.6   |              | 0.45                |                         | 18                | 134               |
| 50000                |                                    |               | 6.3, 6.6   |              | 0.42                |                         | 21                | 161               |
| 63000                |                                    |               | 6.3, 6.6   |              | 0.42                |                         | 25                | 188               |
| 75000                |                                    |               | —          |              | 0.38                |                         | 29                | 213               |
| 90000                |                                    |               | 10.5, 13.8 |              | 0.35                |                         | 34                | 246               |
| 120000               |                                    |               | 10.5, 13.8 |              | 0.35                |                         | 41                | 304               |
| 150000               |                                    |               | —          |              | 0.32                |                         | 49                | 360               |
| 160000               |                                    |               | 10.5, 13.8 |              | 0.31                |                         | 51                | 378               |
| 180000               |                                    |               | 10.5, 13.8 |              | 0.29                |                         | 56                | 413               |
| 240000               |                                    |               | —          |              | 0.26                |                         | 70                | 484               |



# TECHNICAL DATA



Over 50 Years of Excellence  
in Security Solutions

## 01 POWER TRASFORMER

High-voltage transformer and substation transition and substation applications with advanced technology and high reliability performance

### 330kV Oil-Immersed Three-Phase Three-Winding Unexcited Voltage Regulating Power Transformer

| Rated Capacity (MVA) | Rated Voltage HV and Tapping Range |               |                   |              | No Load Current (%) | Short-Circuit Impedance      | No Load Loss (kW) | On Load Loss (kW) |
|----------------------|------------------------------------|---------------|-------------------|--------------|---------------------|------------------------------|-------------------|-------------------|
|                      | Rated HV                           | Tapping Range | Rated LV          | Vector Group |                     |                              |                   |                   |
| 90000                | 330 / 345                          | ±2×2.5        | 10.5, 13.8, 15.75 | YNyn0d11     | 0.37                | HV-MV: 24~26<br>HV-LV: 14~15 | 42                | 302               |
| 120000               |                                    |               |                   |              | 0.37                | HV-MV: 24~26<br>HV-LV: 14~15 | 53                | 374               |
| 150000               |                                    |               |                   |              | 0.34                | HV-MV: 24~26<br>HV-LV: 14~15 | 63                | 442               |
| 180000               |                                    |               |                   |              | 0.34                | HV-MV: 24~26<br>HV-LV: 14~15 | 72                | 507               |
| 240000               |                                    |               |                   |              | 0.32                | HV-MV: 24~26<br>HV-LV: 14~15 | 89                | 629               |

### 220kV Oil-Immersed Three-Phase Three-Winding Unexcited Voltage Regulating Power Transformer

| Rated Capacity (MVA) | Rated Voltage HV and Tapping Range |               |                                  |              | No Load Current (%) | Short-Circuit Impedance                                    | No Load Loss (kW) | On Load Loss (kW) |
|----------------------|------------------------------------|---------------|----------------------------------|--------------|---------------------|------------------------------------------------------------|-------------------|-------------------|
|                      | Rated HV                           | Tapping Range | Rated LV                         | Vector Group |                     |                                                            |                   |                   |
| 31500                | 220 / 230 / 242                    | ±2×2.5        | 6.3, 6.6, 10.5, 21, 36, 37, 38.5 | YNyn0d11     | 0.45                | HV-MV: 22~24<br>HV-LV: 12~14<br>HV-MV: 22~24<br>MV-LV: 7~9 | 18                | 138               |
| 40000                |                                    |               |                                  |              | 0.40                |                                                            | 21                | 165               |
| 50000                |                                    |               |                                  |              | 0.35                |                                                            | 24                | 194               |
| 63000                |                                    |               |                                  |              | 0.35                |                                                            | 29                | 231               |
| 90000                |                                    |               |                                  |              | 0.31                |                                                            | 37                | 300               |
| 120000               |                                    |               |                                  |              | 0.31                |                                                            | 46                | 369               |
| 150000               |                                    |               |                                  |              | 0.26                |                                                            | 55                | 438               |
| 180000               |                                    |               |                                  |              | 0.26                |                                                            | 62                | 500               |
| 240000               |                                    |               |                                  |              | 0.22                |                                                            | 72                | 616               |
| 300000               |                                    |               |                                  |              | 0.19                |                                                            | 91                | 726               |



# TECHNICAL DATA



Over 50 Years of Excellence  
in Security Solutions

## 01 POWER TRASFORMER

High-voltage transformer and substation transition and substation applications with advanced technology and high reliability performance

### 220kV Oil-Immersed Three-Phase Double-Winding On-Load Voltage Regulating Power Transformer

| Rated Capacity<br>(kVA) | Rated Voltage HV and Tapping Range |                                      |                               |              | No Load<br>Current (%) | Short-Circuit<br>Impedance | No Load Loss<br>(kW) | On Load Loss<br>(kW) |
|-------------------------|------------------------------------|--------------------------------------|-------------------------------|--------------|------------------------|----------------------------|----------------------|----------------------|
|                         | Rated HV                           | Tapping<br>Range                     | Rated LV                      | Vector Group |                        |                            |                      |                      |
| 31500                   | 220 / 230                          | ±4×1.25% /<br>±6×1.25% /<br>±8×1.25% | 6.3 / 6.6 / 10.5 /<br>21      | YNd11        | 0.46                   | 12~14                      | 17                   | 115                  |
| 40000                   |                                    |                                      | 6.3 / 6.6 / 10.5 /<br>21      |              | 0.46                   |                            | 20                   | 134                  |
| 50000                   |                                    |                                      | 6.3 / 6.6 / 10.5 /<br>21      |              | 0.42                   |                            | 24                   | 161                  |
| 63000                   |                                    |                                      | 6.3 / 6.6 / 10.5 /<br>21      |              | 0.42                   |                            | 28                   | 188                  |
| 90000                   |                                    |                                      | 10.5 / 21                     |              | 0.36                   |                            | 35                   | 246                  |
| 120000                  |                                    |                                      | 10.5 / 21 / 36 / 37<br>/ 38.5 |              | 0.36                   |                            | 43                   | 304                  |
| 150000                  |                                    |                                      | 10.5 / 21 / 36 / 37<br>/ 38.5 |              | 0.33                   |                            | 51                   | 360                  |
| 180000                  |                                    |                                      | 10.5 / 21 / 36 / 37<br>/ 38.5 |              | 0.30                   |                            | 59                   | 413                  |
| 120000                  |                                    |                                      | 6.6 / 69                      |              | 0.36                   |                            | 45                   | 303                  |
| 150000                  |                                    |                                      |                               |              | 0.33                   |                            | 53                   | 355                  |
| 180000                  |                                    |                                      |                               |              | 0.30                   |                            | 62                   | 406                  |
| 240000                  |                                    |                                      |                               |              | 0.24                   |                            | 77                   | 504                  |

### 220kV Oil-Immersed Three-Phase Three-Winding On-Load Voltage Regulating Power Transformer

| Rated Capacity<br>(kVA) | Rated Voltage HV and Tapping Range |                                      |                                           |              | No Load Current<br>(%) | Impedance<br>Voltage (%)                   | No Load Loss<br>(kW) | On Load Loss<br>(kW) |
|-------------------------|------------------------------------|--------------------------------------|-------------------------------------------|--------------|------------------------|--------------------------------------------|----------------------|----------------------|
|                         | Rated HV                           | Tapping Range                        | Rated LV                                  | Vector Group |                        |                                            |                      |                      |
| 31500                   | 220 / 230                          | ±4×1.25% /<br>±6×1.25% /<br>±8×1.25% | 6.3 / 6.6 / 10.5 /<br>21 / 36 / 37 / 38.5 | YNyn0d11     | 0.50                   | HV-MV: 12~14<br>HV-LV: 22~24<br>MV-LV: 7~9 | 19                   | 138                  |
| 40000                   |                                    |                                      |                                           |              | 0.48                   |                                            | 23                   | 165                  |
| 50000                   |                                    |                                      |                                           |              | 0.48                   |                                            | 26                   | 194                  |
| 63000                   |                                    |                                      |                                           |              | 0.44                   |                                            | 31                   | 231                  |
| 90000                   |                                    |                                      | 10.5 / 21 / 36 / 37<br>/ 38.5             |              | 0.35                   |                                            | 40                   | 300                  |
| 120000                  |                                    |                                      |                                           |              | 0.35                   |                                            | 51                   | 369                  |
| 150000                  |                                    |                                      |                                           |              | 0.31                   |                                            | 59                   | 438                  |
| 180000                  |                                    |                                      |                                           |              | 0.31                   |                                            | 68                   | 538                  |
| 240000                  |                                    |                                      |                                           |              | 0.28                   |                                            | 85                   | 667                  |



# TECHNICAL DATA



Over 50 Years of Excellence  
in Security Solutions

## 01 POWER TRASFORMER

High-voltage transformer and substation transition and substation applications with advanced technology and high reliability performance

### 110kV Oil-Immersed Three-Phase Double-Winding Unexcited Voltage Regulating Power Transformer

| Rated Capacity (kVA) | Rated Voltage HV and Tapping Range |               |                        |              | No Load Current (%) | Short-Circuit Impedance | No Load Loss (kW) | On Load Loss (kW) |
|----------------------|------------------------------------|---------------|------------------------|--------------|---------------------|-------------------------|-------------------|-------------------|
|                      | Rated HV                           | Tapping Range | Rated LV               | Vector Group |                     |                         |                   |                   |
| 6300                 | 110 / 115 / 121                    | ±2×2.5%       | 6.3 / 6.6 / 10.5       | YNd11        | 0.50                | 10.5                    | 4.1               | 32                |
| 8000                 |                                    |               |                        |              | 0.50                |                         | 4.9               | 38                |
| 10000                |                                    |               |                        |              | 0.46                |                         | 5.8               | 45                |
| 12500                |                                    |               |                        |              | 0.46                |                         | 6.8               | 53                |
| 16000                |                                    |               |                        |              | 0.43                |                         | 8.3               | 65.7              |
| 20000                |                                    |               |                        |              | 0.43                |                         | 9.7               | 79                |
| 25000                |                                    |               |                        |              | 0.40                |                         | 11.4              | 94                |
| 31500                |                                    |               |                        |              | 0.38                |                         | 13.5              | 111               |
| 40000                |                                    |               |                        |              | 0.36                |                         | 16.2              | 133               |
| 50000                |                                    |               |                        |              | 0.34                |                         | 19.4              | 158               |
| 63000                |                                    |               |                        |              | 0.30                |                         | 22.9              | 187               |
| 75000                |                                    |               |                        |              | 0.26                | 26.0                    | 212               |                   |
| 90000                |                                    |               | 0.24                   |              | 29.7                | 245                     |                   |                   |
| 120000               |                                    |               | 13.8 / 15.75 / 18 / 21 |              | 0.22                | 37.3                    | 303               |                   |
| 150000               |                                    |               |                        |              | 0.19                | 44.1                    | 359               |                   |
| 180000               |                                    |               |                        |              | 0.16                | 49.5                    | 411               |                   |

### 110kV Oil-Immersed Three-Phase Three-Winding Unexcited Voltage Regulating Power Transformer

| Rated Capacity (kVA) | Rated Voltage HV and Tapping Range |                |                |              | No Load Current (%) | Impedance Voltage (%)                         | No Load Loss (kW) | On Load Loss (kW) |
|----------------------|------------------------------------|----------------|----------------|--------------|---------------------|-----------------------------------------------|-------------------|-------------------|
|                      | Rated HV                           | Tapping Range  | Rated LV       | Vector Group |                     |                                               |                   |                   |
| 6300                 | 110 / 115 / 121                    | ±2×2.5%        | 36 / 37 / 38.5 | YNyn0d11     | 0.53                | HV-MV: 17.5~18.5<br>HV-LV: 10.5<br>MV-LV: 6.5 | 4.9               | 40                |
| 8000                 |                                    |                |                |              | 0.50                |                                               | 5.8               | 48                |
| 10000                |                                    |                |                |              | 0.47                |                                               | 6.9               | 56                |
| 12500                |                                    |                |                |              | 0.45                |                                               | 8.1               | 67                |
| 16000                |                                    |                |                |              | 0.42                |                                               | 9.8               | 81                |
| 20000                |                                    |                |                |              | 0.42                |                                               | 11.6              | 95                |
| 25000                |                                    |                |                |              | 0.38                |                                               | 13.5              | 113               |
| 31500                |                                    |                |                |              | 0.38                |                                               | 16.2              | 134               |
| 40000                |                                    |                |                |              | 0.35                |                                               | 19.1              | 161               |
| 50000                |                                    |                |                |              | 0.35                |                                               | 22.9              | 192               |
| 63000                |                                    | 36 / 37 / 38.5 | ±2×2.5%        |              | 0.32                |                                               | 27.1              | 230               |



# TECHNICAL DATA

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 01 POWER TRASFORMER

High-voltage transformer and substation transition and substation applications with advanced technology and high reliability performance

SOFAB offers a comprehensive range of oil-immersed power transformers designed to meet a wide variety of power transmission and distribution requirements. Our transformer solutions are available across different voltage classes, rated capacities, winding configurations, and technical specifications to accommodate the specific requirements of each project.

Transformer configurations may vary according to voltage level, rated capacity, system requirements, application, installation conditions, and project specifications. Depending on the required configuration, transformers can be supplied with different winding arrangements, voltage and tapping ranges, vector groups, impedance characteristics, and performance parameters.

Every transformer application presents different electrical and operational requirements. SOFAB can provide transformer solutions configured to meet the specific needs of each project, subject to technical evaluation and approved specifications.



TRUSTED POWER SOLUTIONS.  
DELIVERING RELIABILITY.

## POWER TRANSFORMER

## POWER TRANSFORMER

EFFICIENT • RELIABLE • BUILT TO PERFORM

SOFAB Power Transformers are engineered for high performance, long service life, and maximum reliability. Designed and manufactured to meet international standards, our transformers ensure safe and efficient power distribution for a wide range of applications.

### KEY FEATURES

- HIGH RELIABILITY**  
Designed for stable operation and long service life
- ENERGY EFFICIENT**  
Low no-load and load losses for better efficiency
- ADVANCED INSULATION**  
High quality insulation system for maximum safety
- ROBUST CONSTRUCTION**  
Built with premium materials for harsh environment performance
- SAFETY ASSURED**  
Compliant with IEC, IEEE and other international standards
- EASY MAINTENANCE**  
User-friendly design for simplified installation and maintenance



### TYPICAL TECHNICAL SPECIFICATIONS

|                                                                                                                        |                                                                                                                                            |                                                                                                                                                  |                                                                                                                                       |                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <br>Rated Capacity<br>Up to 180 MVA | <br>Rated Voltage (HV)<br>Up to 330 kV                  | <br>Rated Voltage (LV)<br>Up to 69 kV                       | <br>Frequency<br>50 / 60 Hz                      | <br>Phase<br>1~ or 3~                              |
| <br>Cooling Type<br>ONAN / ONAF     | <br>Vector Group<br>YNd, YNd11, Dyn11<br>or as required | <br>Tapping Range<br>$\pm 2 \times 2.5\%$ or<br>as required | <br>Insulation Level<br>Comply with<br>IEC 60076 | <br>Standards<br>IEC, IEEE, ANSI<br>or as required |

**BUILT FOR PERFORMANCE**  
Engineered to deliver consistent power with maximum efficiency.

**QUALITY ASSURED**  
Each unit is tested for safety, reliability and performance.

**EXPERT SUPPORT**  
Our team is ready to support you from selection to after-sales.

**CUSTOMIZED SOLUTIONS**  
We provide tailored transformer solutions for your specific needs.

Powering Today. Protecting Tomorrow.



SO FAB TRUST MIDDLE EAST | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia  
T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [Sales@sofab.cc](mailto:Sales@sofab.cc)

# TECHNICAL DATA



Over 50 Years of Excellence  
in Security Solutions

## 01 POWER TRASFORMER

High-voltage transformer and substation transition and substation applications with advanced technology and high reliability performance

### 110kV Oil-Immersed Three-Phase Double-Winding On-Load Voltage Regulating Power Transformer

| Rated Capacity (kVA)<br>Rated capacity | Rated Voltage HV and Tapping Range |                               |                          |              | No Load Current (%) | Impedance Voltage (%) | No Load Loss (kW) | On Load Loss (kW) |
|----------------------------------------|------------------------------------|-------------------------------|--------------------------|--------------|---------------------|-----------------------|-------------------|-------------------|
|                                        | Rated HV                           | Tapping Range                 | Rated LV                 | Vector Group |                     |                       |                   |                   |
| 6300                                   | 110                                | ±4×1.25<br>±6×1.25<br>±8×1.25 | 6.3<br>6.6<br>10.5<br>21 | YNd11        | 0.51                | 10.5<br>10.5          | 4.4               | 32                |
| 8000                                   |                                    |                               |                          |              | 0.51                |                       | 5.3               | 38                |
| 10000                                  |                                    |                               |                          |              | 0.47                |                       | 6.2               | 45                |
| 12500                                  |                                    |                               |                          |              | 0.47                |                       | 7.4               | 53                |
| 16000                                  |                                    |                               |                          |              | 0.44                |                       | 8.9               | 66                |
| 20000                                  |                                    |                               |                          |              | 0.44                |                       | 10.6              | 79                |
| 25000                                  |                                    |                               |                          |              | 0.41                | 10.5-18               | 12.5              | 94                |
| 31500                                  |                                    |                               |                          |              | 0.41                |                       | 14.9              | 111               |
| 40000                                  |                                    |                               |                          |              | 0.37                |                       | 17.8              | 140               |
| 50000                                  |                                    |                               |                          |              | 0.37                |                       | 21.0              | 175               |
| 63000                                  |                                    |                               |                          |              | 0.34                |                       | 25.0              | 209               |



# TECHNICAL DATA



Over 50 Years of Excellence  
in Security Solutions

## 01 POWER TRASFORMER

High-voltage transformer and substation transition and substation applications with advanced technology and high reliability performance

### 110kV Oil-Immersed Three-Phase Three-Winding On-Load Voltage Regulating Power Transformer

| Rated Capacity (kVA)<br>Rated capacity | Rated Voltage HV and Tapping Range |                                                                   |                          |              | No Load Current (%) | Impedance Voltage (%)                       | No Load Loss (kW) | On Load Loss (kW) |
|----------------------------------------|------------------------------------|-------------------------------------------------------------------|--------------------------|--------------|---------------------|---------------------------------------------|-------------------|-------------------|
|                                        | Rated HV                           | Tapping Range                                                     | Rated LV                 | Vector Group |                     |                                             |                   |                   |
| 6300                                   | 110                                | $\pm 4 \times 1.25$<br>$\pm 6 \times 1.25$<br>$\pm 8 \times 1.25$ | 6.3<br>6.6<br>10.5<br>11 | YNyn0d11     | 0.61                | HV-MV: 10.5<br>HV-LV: 17.5-19<br>MV-LV: 6.5 | 5.3               | 40                |
| 8000                                   |                                    |                                                                   |                          |              | 0.61                |                                             | 6.3               | 48                |
| 10000                                  |                                    |                                                                   |                          |              | 0.57                |                                             | 7.5               | 56                |
| 12500                                  |                                    |                                                                   |                          |              | 0.57                |                                             | 8.9               | 67                |
| 16000                                  |                                    |                                                                   |                          |              | 0.54                |                                             | 10.6              | 81                |
| 20000                                  |                                    |                                                                   |                          |              | 0.54                |                                             | 12.5              | 95                |
| 25000                                  |                                    |                                                                   |                          |              | 0.50                |                                             | 14.9              | 113               |
| 31500                                  |                                    |                                                                   |                          |              | 0.50                |                                             | 17.7              | 134               |
| 40000                                  |                                    |                                                                   |                          |              | 0.46                |                                             | 21.2              | 161               |
| 50000                                  |                                    |                                                                   |                          |              | 0.46                |                                             | 25.0              | 192               |
| 63000                                  |                                    |                                                                   |                          |              | 0.42                |                                             | 29.8              | 230               |



# TECHNICAL DATA



Over 50 Years of Excellence  
in Security Solutions

## 01 POWER TRASFORMER

High-voltage transformer and substation transition and substation applications with advanced technology and high reliability performance

### 66kV Oil-Immersed Three-Phase Double-Winding **Unexcited** Voltage Regulating Power Transformer

| Rated Capacity (kVA)<br>Rated capacity | Rated Voltage HV and Tapping Range |               |          |              | No Load Current (%) | Impedance Voltage (%) | No Load Loss (kW) | On Load Loss (kW) |
|----------------------------------------|------------------------------------|---------------|----------|--------------|---------------------|-----------------------|-------------------|-------------------|
|                                        | Rated HV                           | Tapping Range | Rated LV | Vector Group |                     |                       |                   |                   |
| 3150                                   | 63 / 66 / 69                       | ±5            | 6.3      | YNd11        | 0.70                | 8                     | 2.2               | 20.7              |
| 4000                                   |                                    | ±2×2.5        |          |              | 0.64                | 8                     | 2.6               | 24.6              |
| 5000                                   |                                    |               |          |              | 0.54                | 8                     | 3.1               | 27.6              |
| 6300                                   |                                    |               |          |              | 0.48                | 8                     | 4.0               | 30.8              |
| 8000                                   |                                    |               |          |              | 0.48                | 8                     | 4.9               | 36.5              |
| 10000                                  |                                    |               |          |              | 0.45                | 8                     | 5.8               | 43.0              |
| 12500                                  |                                    |               | 6.6      |              | 0.45                | 8                     | 6.8               | 51.1              |
| 16000                                  |                                    |               |          |              | 0.42                | 9                     | 8.3               | 62.8              |
| 20000                                  |                                    |               |          |              | 0.42                | 9                     | 9.7               | 76.1              |
| 25000                                  |                                    | 10.5          |          |              | 0.38                | 9                     | 11.4              | 90.0              |
| 31500                                  |                                    |               |          |              | 0.35                | 9                     | 13.5              | 108.0             |
| 40000                                  |                                    |               |          |              | 0.35                | 9                     | 16.2              | 126.9             |
| 50000                                  |                                    |               | 0.32     |              | 9                   | 19.4                  | 150.3             |                   |
| 63000                                  |                                    |               | 0.29     |              | 9                   | 22.9                  | 178.2             |                   |

### 66kV Oil-Immersed Three-Phase Double-Winding **On-Load** Voltage Regulating Power Transformer

| Rated Capacity<br>(kVA)<br>Rated capacity | Rated Voltage HV and Tapping Range |                               |                    |              | No Load<br>Current<br>(%) | Impedance<br>Voltage<br>(%) | No Load Loss<br>(kW)(11) | On Load Loss<br>(kW)(11) |
|-------------------------------------------|------------------------------------|-------------------------------|--------------------|--------------|---------------------------|-----------------------------|--------------------------|--------------------------|
|                                           | Rated HV                           | Tapping Range                 | Rated LV           | Vector Group |                           |                             |                          |                          |
| 6300                                      | 63                                 | ±4×1.25<br>±6×1.25<br>±8×1.25 | 6.3<br>6.6<br>10.5 | YNd11        | 0.48                      | 9                           | 4.4                      | 30.8                     |
| 8000                                      | 66                                 |                               |                    |              | 0.48                      |                             | 5.3                      | 36.5                     |
| 10000                                     | 69                                 |                               |                    |              | 0.45                      |                             | 6.2                      | 43.0                     |
| 12500                                     | 63                                 |                               |                    |              | 0.45                      |                             | 7.4                      | 51.1                     |
| 16000                                     | 66                                 |                               |                    |              | 0.42                      |                             | 8.9                      | 62.8                     |
| 20000                                     | 69                                 |                               |                    |              | 0.42                      |                             | 10.6                     | 76.1                     |
| 25000                                     | 63                                 |                               |                    |              | 0.38                      |                             | 12.5                     | 90.0                     |
| 31500                                     | 66                                 |                               |                    |              | 0.35                      |                             | 14.8                     | 108.0                    |
| 40000                                     | 69                                 |                               |                    |              | 0.35                      |                             | 17.7                     | 126.9                    |
| 50000                                     | 63                                 |                               |                    |              | 0.32                      | 10~12                       | 20.9                     | 150.3                    |
| 63000                                     | 66                                 |                               |                    |              | 0.29                      |                             | 24.7                     | 178.2                    |
|                                           | 69                                 |                               |                    |              |                           |                             |                          |                          |



# PRODUCT OVERVIEW

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 02 OIL-IMMERSED

Reliable oil-immersed distribution transformers for medium/high-voltage systems, featuring superior insulation and long service life.

### TECHNICAL FEATURES & PERFORMANCE

SO FAB Oil-Immersed Distribution Transformers are designed for reliable, efficient, and long-term operation in medium- and high-voltage distribution systems. The transformer oil tank adopts a fully sealed structure, helping prevent the insulating oil from coming into direct contact with air and contributing to extended service life. Improved sealing components enhance operational reliability and support dependable performance during continuous operation.

The transformer features a corrugated plate radiator that provides effective thermal expansion and heat dissipation while eliminating the need for a conventional oil conservator. This contributes to a compact and practical transformer design with a small footprint. The product also offers good economic performance, with average reductions of 60%–80% in no-load current and 25%–35% in no-load losses, helping improve operating efficiency and reduce energy-related costs.

### KEY FEATURES

- ✓ Reliable Power Distribution
- ✓ Oil-Immersed Insulation & Cooling
- ✓ On-Load Voltage Regulation Options
- ✓ Robust and Durable Construction
- ✓ Project-Specific Configurations
- ✓ Suitable for Utility, Commercial & Industrial Applications

## 02

## OIL-IMMERSED DISTRIBUTION TRANSFORMER

SO FAB oil-immersed distribution transformers are engineered to deliver reliable, efficient, and durable performance for power distribution networks and a wide range of applications.



**RELIABLE PERFORMANCE**  
Designed for long service life and stable operation.



**HIGH EFFICIENCY**  
Low losses and high efficiency for reduced operating costs.



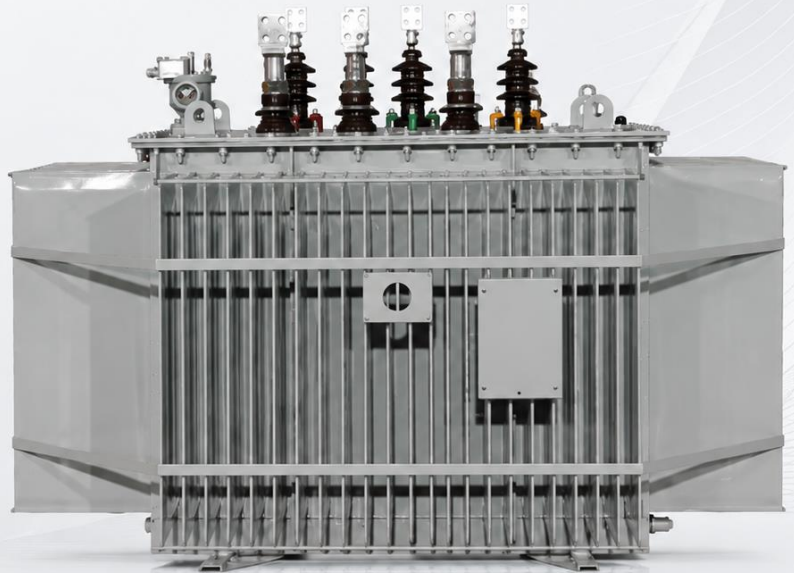
**ROBUST DESIGN**  
Advanced design and quality materials for superior mechanical strength.



**SAFE & SECURE**  
Equipped with multiple protection features to ensure safe operation.



**EASY MAINTENANCE**  
User-friendly design for convenient inspection and maintenance.



**QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.**

  
EXPERT  
ENGINEERING

  
STRICT QUALITY  
CONTROL

  
ADVANCED  
MANUFACTURING

  
DEDICATED  
SUPPORT



SO FAB TRUST MIDDLE EAST | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia

T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [Sales@sofab.cc](mailto:Sales@sofab.cc)

# PRODUCT OVERVIEW

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 02 OIL-IMMERSED

Reliable oil-immersed distribution transformers for medium/high-voltage systems, featuring superior insulation and long service life.

### TECHNICAL FEATURES & PERFORMANCE

This product is a fully oil-sealed amorphous alloy power transformer. It adopts a sealed-tank design similar to conventional sealed power transformers, providing reliable insulation and protection of the transformer's internal components. The core is manufactured using amorphous alloy material, whose principal elements include iron, nickel, cobalt, boron and carbon. This material offers excellent isotropic soft-magnetic properties, low magnetization power and minimal structural defects, enabling efficient and stable magnetic operation.

#### Performance Advantages

##### 1. Ultra-Low No-Load Loss

The amorphous alloy core provides superior magnetic performance compared with conventional silicon steel. It can reduce no-load losses by approximately 60%–80%, significantly lowering standby energy consumption and improving overall operating efficiency.

##### 2. High Energy Efficiency & Environmental Benefits

Reduced transformer losses lower the demand for electricity generation and help decrease associated greenhouse-gas emissions, including carbon dioxide. This makes the transformer well suited for energy-saving and low-carbon power distribution applications.

##### 3. Excellent Temperature Stability

The amorphous alloy core maintains stable magnetic properties across a wide operating temperature range, allowing the transformer to adapt reliably to varying and demanding operating conditions.

##### 4. Fully Sealed Construction

The fully oil-sealed construction helps isolate the transformer oil and internal components from external environmental influences, supporting reliable insulation performance and long-term service stability.

### KEY FEATURES

- ✓ 60%–80% reduction in no-load losses
- ✓ Lower standby energy consumption
- ✓ High energy efficiency and reduced operating losses
- ✓ Reduced environmental impact and greenhouse-gas emissions
- ✓ Stable magnetic performance over a wide temperature range
- ✓ Energy-Saving & Environmentally Friendly
- ✓ Fully oil-sealed construction for dependable operation

## 02

## OIL-IMMERSED DISTRIBUTION TRANSFORMER

SO FAB oil-immersed distribution transformers are engineered to deliver reliable, efficient, and durable performance for power distribution networks and a wide range of applications.



**RELIABLE PERFORMANCE**  
Designed for long service life and stable operation.



**HIGH EFFICIENCY**  
Low losses and high efficiency for reduced operating costs.



**ROBUST DESIGN**  
Advanced design and quality materials for superior mechanical strength.



**SAFE & SECURE**  
Equipped with multiple protection features to ensure safe operation.



**EASY MAINTENANCE**  
User-friendly design for convenient inspection and maintenance.



**QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.**

  
EXPERT  
ENGINEERING

  
STRICT QUALITY  
CONTROL

  
ADVANCED  
MANUFACTURING

  
DEDICATED  
SUPPORT



SO FAB TRUST MIDDLE EAST | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia  
T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [Sales@sofab.cc](mailto:Sales@sofab.cc)

# PRODUCT OVERVIEW

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 02 OIL-IMMERSED

Reliable oil-immersed distribution transformers for medium/high-voltage systems, featuring superior insulation and long service life.

### TECHNICAL FEATURES & PERFORMANCE

Power transformers are essential equipment widely used in electrical power systems. The **S13-M-RL** and **S11-M-RL** series are developed as an improved generation of traditional plug-in power transformers, featuring a **three-dimensional triangular wound core** and optimized structural design.

These transformers offer **better performance, lower losses, reduced noise, and improved material efficiency**, making them suitable for modern power distribution applications and energy-saving projects.

The product is designed to support **energy conservation and environmental protection**, while providing reliable operation for urban and rural power grids and various power projects.

### KEY FEATURES & ADVANTAGES

- ✓ Three-dimensional triangular wound core design
- ✓ Lower no-load and operating losses
- ✓ Reduced operating noise
- ✓ Improved material efficiency
- ✓ Energy-saving and environmentally friendly
- ✓ Reliable performance for power distribution systems
- ✓ Suitable for urban, rural, and industrial power projects

## 03

## THREE-DIMENSIONAL TRIANGULAR CORE TRANSFORMER

The S13-M-RL and S11-M-RL series three-dimensional triangular core power transformers are a new generation of energy-saving transformers with more reasonable structure, better performance and more significant energy saving.



#### ENERGY-SAVING DESIGN

New generation transformer with more reasonable structure and higher energy efficiency.



#### WIDELY USED

The most widely used basic products for electric power for decades worldwide.



#### LOW OPERATING NOISE

Operating noise is lower, loss is reduced and material saving is better.



#### ENVIRONMENTALLY FRIENDLY

In line with international and domestic guidelines on low-carbon economy, energy conservation and emission reduction.



#### RELIABLE PERFORMANCE

Proven technology with stable and reliable operation for various power projects.



**QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.**



PROVEN  
TECHNOLOGY



STRICT QUALITY  
CONTROL



SUPPORTS  
SUSTAINABLE ENERGY



DEDICATED  
SUPPORT



SO FAB TRUST MIDDLE EAST | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia  
T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [sales@sofab.cc](mailto:sales@sofab.cc)

# TECHNICAL DATA



Over 50 Years of Excellence  
in Security Solutions

## 02 OIL-IMMERSED

Reliable oil-immersed distribution transformers for medium/high-voltage systems, featuring superior insulation and long service life.

### 35kV Oil-Immersed Three-Phase Double-Winding Power Transformer

| Rated Capacity (kVA) | Rated Voltage HV and Tapping Range |                      |                   |              | No Load Current (%) | Impedance Voltage (%) | No Load Losses (kW) | On Load Losses (kW) |
|----------------------|------------------------------------|----------------------|-------------------|--------------|---------------------|-----------------------|---------------------|---------------------|
|                      | Rated Voltage HV                   | Tapping Range        | Rated Voltage LV  | Vector Group |                     |                       |                     |                     |
| 3150                 | 35-38.5                            | $\pm 2 \times 2.5\%$ | 3.15 / 6.3 / 10.5 | Yd11         | 0.36                | 7.0                   | 1.7                 | 20.7                |
| 4000                 | 35-38.5                            | $\pm 2 \times 2.5\%$ | 3.15 / 6.3 / 10.5 | Yd11         | 0.36                | 7.0                   | 2.0                 | 24.6                |
| 5000                 | 35-38.5                            | $\pm 2 \times 2.5\%$ | 3.15 / 6.3 / 10.5 | Yd11         | 0.36                | 7.0                   | 2.4                 | 28.2                |
| 6300                 | 35-38.5                            | $\pm 2 \times 2.5\%$ | 3.15 / 6.3 / 10.5 | Yd11         | 0.36                | 7.0                   | 2.9                 | 31.5                |
| 8000                 | 35-38.5                            | $\pm 2 \times 2.5\%$ | 3.15 / 6.3 / 10.5 | Yd11         | 0.28                | 7.0                   | 4.0                 | 34.6                |
| 10000                | 35-38.5                            | $\pm 2 \times 2.5\%$ | 3.15 / 6.3 / 10.5 | Yd11         | 0.28                | 7.0                   | 4.8                 | 40.8                |
| 12500                | 35-38.5                            | $\pm 2 \times 2.5\%$ | 3.15 / 6.3 / 10.5 | YNd11        | 0.24                | 8.0                   | 5.5                 | 48.4                |
| 16000                | 35-38.5                            | $\pm 2 \times 2.5\%$ | 3.3 / 6.3 / 10.5  | YNd11        | 0.24                | 8.0                   | 6.7                 | 59.2                |
| 20000                | 35-38.5                            | $\pm 2 \times 2.5\%$ | 3.3 / 6.3 / 10.5  | YNd11        | 0.24                | 8.0                   | 7.9                 | 71.6                |
| 25000                | 35-38.5                            | $\pm 2 \times 2.5\%$ | 3.3 / 6.3 / 10.5  | YNd11        | 0.20                | 10.0                  | 9.4                 | 84.6                |
| 31500                | 35-38.5                            | $\pm 2 \times 2.5\%$ | 3.3 / 6.3 / 10.5  | YNd11        | 0.20                | 10.0                  | 11.1                | 100.8               |

### 35kV Oil-Immersed Three-Phase Double-Winding On-Load Regulating Power Transformer

| Rated Capacity (kVA) | Rated Voltage HV (kV) | Tapping Range      | Rated Voltage LV (kV) | Vector Group | No Load Current (%) | Impedance Voltage (%) | No Load Losses (kW) | On Load Losses (kW) |
|----------------------|-----------------------|--------------------|-----------------------|--------------|---------------------|-----------------------|---------------------|---------------------|
| 3150                 | 35-38.5               | $\pm 3 \times 2.5$ | 6.3 / 10.5            | Yd11         | 0.40                | 7.0                   | 1.8                 | 22.2                |
| 4000                 | 35-38.5               | $\pm 3 \times 2.5$ | 6.3 / 10.5            | Yd11         | 0.40                | 7.0                   | 2.1                 | 26.2                |
| 5000                 | 35-38.5               | $\pm 3 \times 2.5$ | 6.3 / 10.5            | Yd11         | 0.40                | 7.0                   | 2.6                 | 30.8                |
| 6300                 | 35-38.5               | $\pm 3 \times 2.5$ | 6.3 / 10.5            | Yd11         | 0.40                | 7.0                   | 3.1                 | 33.0                |
| 8000                 | 35-38.5               | $\pm 3 \times 2.5$ | 6.3 / 10.5            | Yd11         | 0.32                | 7.5                   | 4.3                 | 36.5                |
| 10000                | 35-38.5               | $\pm 3 \times 2.5$ | 6.3 / 10.5            | Yd11         | 0.32                | 7.5                   | 5.1                 | 43.2                |
| 12500                | 35-38.5               | $\pm 3 \times 2.5$ | 6.3 / 6.6 / 10.5      | YNd11        | 0.28                | 8.0                   | 6.0                 | 51.1                |
| 16000                | 35-38.5               | $\pm 3 \times 2.5$ | 6.3 / 6.6 / 10.5      | YNd11        | 0.28                | 8.0                   | 7.2                 | 63.3                |
| 20000                | 35-38.5               | $\pm 3 \times 2.5$ | 6.3 / 6.6 / 10.5      | YNd11        | 0.28                | 8.0                   | 8.5                 | 74.4                |
| 25000                | 35-38.5               | $\pm 3 \times 2.5$ | 6.3 / 6.6 / 10.5      | YNd11        | 0.24                | 10.0                  | 10.1                | 88.0                |
| 31500                | 35-38.5               | $\pm 3 \times 2.5$ | 6.3 / 6.6 / 10.5      | YNd11        | 0.24                | 10.0                  | 12.0                | 104.4               |



SOFAB TRUST MIDDLE EAST | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia  
T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [Sales@sofab.cc](mailto:Sales@sofab.cc)

# TECHNICAL DATA



Over 50 Years of Excellence  
in Security Solutions

## 02 OIL-IMMERSED

Reliable oil-immersed distribution transformers for medium/high-voltage systems, featuring superior insulation and long service life.

### 10kV Oil-Immersed Three-Phase Double-Winding Unexcited Voltage-Regulating Distribution

| Rated Capacity (kVA) | Rated Voltage HV and Tapping Range |                                   |                  |                      | No Load Current (%) | Impedance Voltage (%) | No Load Losses (kW) | On Load Losses (kW) Dyn11 / Yzn11 | On Load Losses (kW) Yyn0 |
|----------------------|------------------------------------|-----------------------------------|------------------|----------------------|---------------------|-----------------------|---------------------|-----------------------------------|--------------------------|
|                      | Rated Voltage HV                   | Tapping Range                     | Rated Voltage LV | Vector Group         |                     |                       |                     |                                   |                          |
| 30                   | 6 / 8.3 / 10 / 10.5                | $\pm 2 \times 2.5\%$<br>$\pm 5\%$ | 0.4              | Dyn11 / Yzn11 / Yyn0 | 1.20                | 4.0                   | 65                  | 455                               | 430                      |
| 50                   |                                    |                                   |                  |                      | 1.04                | 4.0                   | 80                  | 655                               | 625                      |
| 63                   |                                    |                                   |                  |                      | 0.96                | 4.0                   | 90                  | 785                               | 745                      |
| 80                   |                                    |                                   |                  |                      | 0.96                | 4.0                   | 105                 | 945                               | 900                      |
| 100                  |                                    |                                   |                  |                      | 0.88                | 4.0                   | 120                 | 1140                              | 1080                     |
| 125                  |                                    |                                   |                  |                      | 0.88                | 4.0                   | 135                 | 1360                              | 1295                     |
| 160                  |                                    |                                   |                  |                      | 0.80                | 4.0                   | 160                 | 1665                              | 1585                     |
| 200                  |                                    |                                   |                  |                      | 0.80                | 4.0                   | 190                 | 1970                              | 1870                     |
| 250                  |                                    |                                   |                  |                      | 0.72                | 4.0                   | 230                 | 2300                              | 2195                     |
| 315                  |                                    |                                   |                  |                      | 0.72                | 4.0                   | 270                 | 2760                              | 2630                     |
| 400                  |                                    |                                   |                  |                      | 0.64                | 4.0                   | 330                 | 3250                              | 3095                     |
| 500                  |                                    |                                   |                  |                      | 0.64                | 4.0                   | 385                 | 3900                              | 3710                     |
| 630                  |                                    |                                   |                  |                      | 0.48                | 4.5                   | 460                 | 4460                              |                          |
| 800                  |                                    |                                   |                  |                      | 0.48                | 4.5                   | 560                 | 5400                              |                          |
| 1000                 |                                    |                                   |                  |                      | 0.48                | 4.5                   | 665                 | 7415                              |                          |
| 1250                 |                                    |                                   |                  |                      | 0.40                | 4.5                   | 780                 | 8640                              |                          |
| 1600                 |                                    |                                   |                  |                      | 0.40                | 4.5                   | 940                 | 10440                             |                          |
| 2000                 |                                    |                                   |                  |                      | 0.32                | 5.0                   | 1085                | 13180                             |                          |
| 2500                 |                                    |                                   |                  |                      | 0.32                | 5.0                   | 1280                | 15270                             |                          |

### 10kV Oil-Immersed Three-Phase Double-Winding On-Load Regulating Distribution

| Rated Capacity (kVA) | Rated Voltage HV and Tapping Range |                      |                  |              | No Load Current (%) | Impedance Voltage (%) | No Load Losses (kW) | On Load Losses (kW) |
|----------------------|------------------------------------|----------------------|------------------|--------------|---------------------|-----------------------|---------------------|---------------------|
|                      | Rated Voltage HV                   | Tapping Range        | Rated Voltage LV | Vector Group |                     |                       |                     |                     |
| 200                  | 6 / 6.3 / 10 / 10.5                | $\pm 4 \times 2.5\%$ | 0.4              | Dyn11 / Yyn0 | 0.80                | 4.0                   | 0.31                | 2.90                |
| 250                  | 6 / 6.3 / 10 / 10.5                | $\pm 4 \times 2.5\%$ | 0.4              | Dyn11 / Yyn0 | 0.72                | 4.0                   | 0.35                | 3.42                |
| 315                  | 6 / 6.3 / 10 / 10.5                | $\pm 4 \times 2.5\%$ | 0.4              | Dyn11 / Yyn0 | 0.72                | 4.0                   | 0.43                | 4.10                |
| 400                  | 6 / 6.3 / 10 / 10.5                | $\pm 4 \times 2.5\%$ | 0.4              | Dyn11 / Yyn0 | 0.64                | 4.0                   | 0.51                | 4.95                |
| 500                  | 6 / 6.3 / 10 / 10.5                | $\pm 4 \times 2.5\%$ | 0.4              | Dyn11 / Yyn0 | 0.64                | 4.0                   | 0.61                | 5.89                |
| 630                  | 6 / 6.3 / 10 / 10.5                | $\pm 4 \times 2.5\%$ | 0.4              | Dyn11 / Yyn0 | 0.48                | 4.0                   | 0.77                | 7.26                |
| 800                  | 6 / 6.3 / 10 / 10.5                | $\pm 4 \times 2.5\%$ | 0.4              | Dyn11 / Yyn0 | 0.48                | 4.0                   | 0.90                | 8.89                |
| 1000                 | 6 / 6.3 / 10 / 10.5                | $\pm 4 \times 2.5\%$ | 0.4              | Dyn11 / Yyn0 | 0.48                | 4.5                   | 1.09                | 10.4                |
| 1250                 | 6 / 6.3 / 10 / 10.5                | $\pm 4 \times 2.5\%$ | 0.4              | Dyn11 / Yyn0 | 0.40                | 4.5                   | 1.25                | 12.3                |
| 1600                 | 6 / 6.3 / 10 / 10.5                | $\pm 4 \times 2.5\%$ | 0.4              | Dyn11 / Yyn0 | 0.40                | 4.5                   | 1.54                | 14.7                |
| 2000                 | 6 / 6.3 / 10 / 10.5                | $\pm 4 \times 2.5\%$ | 0.4              | Dyn11 / Yyn0 | 0.32                | 5.0                   | 1.82                | 18.6                |
| 2500                 | 6 / 6.3 / 10 / 10.5                | $\pm 4 \times 2.5\%$ | 0.4              | Dyn11 / Yyn0 | 0.32                | 5.0                   | 2.14                | 21.6                |



# PRODUCT OVERVIEW

# SOFAB

Over 50 Years of Excellence  
in Security Solutions

## 03 DRY-TYPE TRANSFORMER

Reliable oil-immersed distribution transformers for medium/high-voltage systems, featuring superior insulation and long service life.

### TECHNICAL FEATURES & PERFORMANCE

SOFAB Dry-type transformers provide safe, reliable, and environmentally friendly power distribution without the use of insulating oil. They are suitable for direct installation near load centers and are designed for demanding indoor and industrial applications.

#### KEY FEATURES & ADVANTAGES

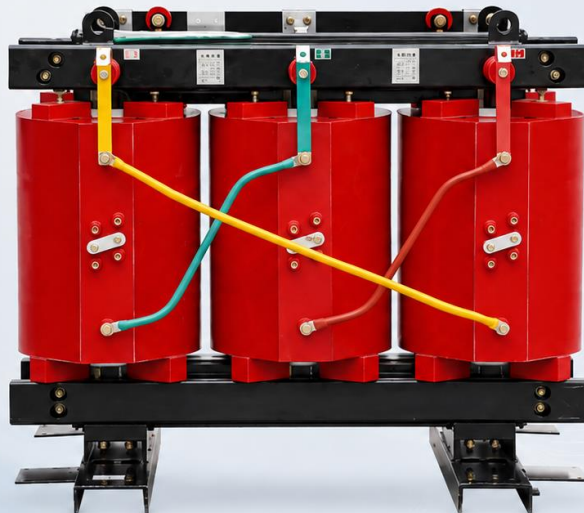
- ✓ Safe & Fire-Resistant – Oil-free, pollution-free, and suitable for installation directly at load centers.
- ✓ Low Maintenance – Easy to install and maintain, with lower overall operating costs.
- ✓ Excellent Moisture Resistance – Can operate at up to 100% relative humidity and can be energized without pre-drying after shutdown.
- ✓ Low Loss & Low Noise – Features low losses, low partial discharge, reduced noise, and excellent heat dissipation.
- ✓ High Overload Capacity – Can operate at up to 150% rated load under forced-air cooling.
- ✓ Reliable Temperature Protection – Equipped with a complete temperature monitoring and protection system for safe operation.
- ✓ High Reliability – Proven reliability based on long-term operating experience and product performance.

#### DRY-TYPE TRANSFORMER RANGE

- 35kV Dry-Type Non-Excitation Regulating Power Transformer
- 35kV Dry-Type On-Load Regulating Power Transformer
- 35kV Dry-Type Transformer for PV, Wind & Energy Storage
- 20kV Dry-Type Non-Excitation Regulating Distribution Transformer
- 10kV Dry-Type Three-Phase Distribution Transformer
- 10kV Dry-Type Transformer for PV, Wind & Energy Storage

## 03

## DRY-TYPE TRANSFORMER



QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.



EXPERT  
ENGINEERING



STRICT QUALITY  
CONTROL



ADVANCED  
MANUFACTURING



DEDICATED  
SUPPORT

# PRODUCT OVERVIEW

# SOFAB

Over 50 Years of Excellence  
in Security Solutions

## 03 DRY-TYPE TRANSFORMER

Reliable oil-immersed distribution transformers for medium/high-voltage systems, featuring superior insulation and long service life.

## TECHNICAL FEATURES & PERFORMANCE

Amorphous alloy dry-type transformers are energy-saving, oil-free transformers featuring an amorphous alloy core with low losses, high electrical resistance, and excellent energy efficiency.

The transformer offers flame-retardant, self-extinguishing, moisture-resistant, crack-resistant, and low-maintenance performance. It is an ideal replacement for conventional dry-type transformers in applications requiring high safety and energy efficiency.

### KEY ADVANTAGES

- Low no-load losses
- High energy efficiency
- Oil-free and flame-retardant
- Moisture and crack resistant
- Low maintenance
- Safe and reliable operation
- Ideal for commercial, industrial, and energy-sensitive applications

## 03

## AMORPHOUS ALLOY DRY TYPE TRANSFORMER



QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.



EXPERT  
ENGINEERING



STRICT QUALITY  
CONTROL



ADVANCED  
MANUFACTURING



DEDICATED  
SUPPORT



SOFAB TRUST MIDDLE EAST | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia  
T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [Sales@sofab.cc](mailto:Sales@sofab.cc)

# PRODUCT OVERVIEW

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 03 DRY-TYPE TRANSFORMER

Reliable oil-immersed distribution transformers for medium/high-voltage systems, featuring superior insulation and long service life.

### TECHNICAL FEATURES & PERFORMANCE

The SGB Series Non-Encapsulated H-Class Dry-Type Transformer adopts advanced German MORA dry-type transformer technology, providing excellent fire resistance, waterproof performance, and environmental protection.

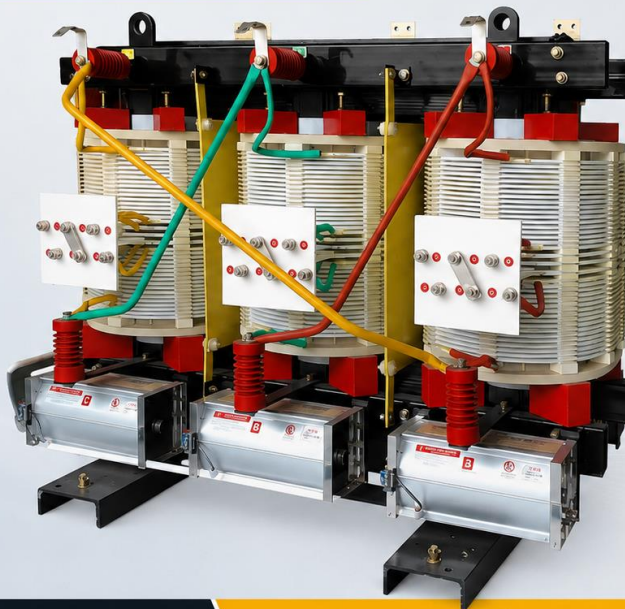
It is an ideal solution for safe and reliable power distribution, particularly in applications with strict fire safety and environmental requirements.

### KEY ADVANTAGES

- H-Class insulation system
- Fire-resistant and waterproof
- Environmentally friendly
- Safe and reliable operation
- Advanced German MORA technology
- Suitable for ships, mines, chemical plants, power facilities, railways, and high-rise buildings.

## 03

## NON-ENCAPSULATED H-CLASS DRY-TYPE TRANSFORMER



QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.

EXPERT  
ENGINEERING

STRICT QUALITY  
CONTROL

ADVANCED  
MANUFACTURING

DEDICATED  
SUPPORT



SO FAB TRUST MIDDLE EAST | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia  
T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [Sales@sofab.cc](mailto:Sales@sofab.cc)

# PRODUCT OVERVIEW

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 03 DRY-TYPE TRANSFORMER

Reliable oil-immersed distribution transformers for medium/high-voltage systems, featuring superior insulation and long service life.

## ENVIRONMENTAL CONDITIONS

The CSD Marine Transformer is a specialized dry-type transformer designed for marine and offshore power distribution applications. It provides safe, reliable, and efficient power conversion for shipboard electrical systems, including lighting, power distribution, and grid-isolation applications.

Designed to withstand demanding marine conditions such as vibration, shock, high humidity, condensation, salt spray, and mold, the transformer delivers stable performance and high operational reliability

## KEY ADVANTAGES

- Designed for marine & offshore applications
- Excellent resistance to humidity, salt spray & mold
- High vibration and shock resistance
- Safe and reliable oil-free construction
- Suitable for shipboard lighting & power distribution
- Stable operation under ship rocking and tilting conditions
- Low maintenance and long service life

# 03

## CSD MARINE TRANSFORMER

CSD marine transformers are specially designed for marine and offshore applications, providing reliable, safe and efficient power supply in harsh marine environments. They are manufactured with high-quality materials and advanced technology to ensure excellent performance, corrosion resistance and long service life.



### MARINE-GRADE DESIGN

Specifically designed for marine and offshore environments with high reliability and safety.



### CORROSION RESISTANT

Manufactured with high-quality materials and protective coating to withstand harsh marine conditions.



### STABLE & RELIABLE OPERATION

Ensures continuous and stable power supply for marine systems and equipment.



### FLEXIBLE CONFIGURATION

Various ratings and configurations are available to meet different marine application requirements.



### LOW MAINTENANCE

Rugged construction and advanced insulation system for reduced maintenance and longer service life.



**QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.**



MARINE  
APPLICATIONS



STRICT QUALITY  
CONTROL



BUILT FOR  
HARSH ENVIRONMENTS



DEDICATED  
SUPPORT

SO FAB TRUST MIDDLE EAST | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia  
T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [Sales@sofab.cc](mailto:Sales@sofab.cc)

# PRODUCT OVERVIEW

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 03 DRY-TYPE TRANSFORMER

Reliable oil-immersed distribution transformers for medium/high-voltage systems, featuring superior insulation and long service life.

## PRODUCT USE

The SOFAB SCB Three-Dimensional Core Transformer offers excellent insulation performance, high mechanical strength, moisture resistance, low noise, and low-maintenance operation.

It is suitable for a wide range of applications, including high-rise buildings, power generation, renewable energy systems, hospitals, hotels, tunnels, railway stations, docks, airports, subways, petrochemical facilities, laboratories, shopping centers, and other critical facilities.

## CONDITIONS OF USE

→ Altitude:  $\leq 1,000$  m

→ Maximum Ambient Temperature:  $40^{\circ}\text{C}$

→ Average Temperature of Hottest Month:  $\leq 30^{\circ}\text{C}$

→ Maximum Annual Average Temperature:  $\leq 20^{\circ}\text{C}$

→ Minimum Temperature:  
✓ Outdoor transformer:  $-25^{\circ}\text{C}$   
✓ Indoor transformer:  $-5^{\circ}\text{C}$

→ Relative Humidity:  $\leq 93\%$

→ No water droplets should form on the transformer surface.

# 03

## SCB THREE-DIMENSIONAL CORE TRANSFORMER

SCB three-dimensional core transformers are dry-type transformers designed with advanced three-dimensional wound core technology, offering high reliability, low losses and excellent performance for a wide range of power distribution applications.



### ADVANCED CORE TECHNOLOGY

Three-dimensional wound core design for lower no-load loss, low noise and high efficiency.



### DRY-TYPE & ENVIRONMENTALLY FRIENDLY

Uses epoxy resin cast insulation, no oil, no leakage, safer and cleaner for indoor applications.



### HIGH RELIABILITY

Excellent mechanical strength, short-circuit resistance and long service life.



### LOW MAINTENANCE

Rugged construction with minimal maintenance required, reducing operating costs.



### WIDE APPLICATION

Suitable for buildings, industrial plants, commercial facilities and other power distribution systems.



**QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.**



PROVEN  
TECHNOLOGY



STRICT QUALITY  
CONTROL



SUITABLE FOR  
MULTIPLE APPLICATIONS



DEDICATED  
SUPPORT

For conditions exceeding the above requirements, operating parameters and protection measures should be appropriately adjusted to ensure safe and reliable operation.

SO FAB TRUST MIDDLE EAST | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia  
T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [Sales@sofab.cc](mailto:Sales@sofab.cc)



# PRODUCT OVERVIEW

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 03 DRY-TYPE TRANSFORMER

Reliable oil-immersed distribution transformers for medium/high-voltage systems, featuring superior insulation and long service life.

## TECHNICAL FEATURES & PERFORMANCE

The SCB Three-Dimensional Core Transformer features a unique three-dimensional wound core composed of three identical core frames arranged in an equilateral triangle. The continuous winding design creates a highly balanced three-phase magnetic circuit with no air gaps and low magnetic reluctance.

This optimized core structure provides excellent three-phase magnetic balance, reduced losses and no-load current, lower operating noise, improved material efficiency, and reliable performance. reduced losses and no-load current, lower operating noise, improved material efficiency, and reliable performance.

### KEY ADVANTAGES

- Three-dimensional wound core design
- Balanced three-phase magnetic circuit
- Low magnetic reluctance and no air gaps
- Reduced no-load current and losses
- Low operating noise
- Improved material efficiency
- Reliable and energy-efficient operation

## 03

## SGB THREE-DIMENSIONAL CORE TRANSFORMER

SGB three-dimensional core transformers are dry-type transformers designed with advanced three-dimensional wound core technology, offering high reliability, low losses and excellent performance for a wide range of power distribution applications.



#### ADVANCED CORE TECHNOLOGY

Three-dimensional wound core design for lower no-load loss, low noise and high efficiency.



#### DRY-TYPE & ENVIRONMENTALLY FRIENDLY

Uses epoxy resin cast insulation, no oil, no leakage, safer and cleaner for indoor applications.



#### HIGH RELIABILITY

Excellent mechanical strength, short-circuit resistance and long service life.



#### LOW MAINTENANCE

Rugged construction with minimal maintenance required, reducing operating costs.



#### WIDE APPLICATION

Suitable for buildings, industrial plants, commercial facilities and other power distribution systems.



**QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.**



PROVEN  
TECHNOLOGY



STRICT QUALITY  
CONTROL



SUITABLE FOR  
MULTIPLE APPLICATIONS



DEDICATED  
SUPPORT



SO FAB TRUST MIDDLE EAST | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia  
T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [Sales@sofab.cc](mailto:Sales@sofab.cc)

# PRODUCT OVERVIEW

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 04 NEW ENERGY TRANSFORMER

Transformers designed for renewable energy applications including

### TECHNICAL FEATURES & PERFORMANCE

The New Energy Substation is designed for power conversion and distribution in new energy generation systems, converting low-voltage AC power into medium- or high-voltage AC power for connection to the national grid.

It is suitable for 10–110kV small and medium-sized substations, as well as applications in factories, mines, petroleum and chemical industries, drilling platforms, and urban and rural power systems.

### KEY ADVANTAGES

- Designed for new energy power systems
- power conversion and distribution
- Suitable for 10–110kV applications
- Energy-saving and environmentally friendly
- Intelligent operation and control
- Excellent electrical performance
- Innovative and compact structural design
- Suitable for solar, wind, industrial, and utility power applications

## 04

## NEW ENERGY TRANSFORMER

New energy transformers are specially designed for renewable energy applications such as solar, wind and energy storage systems, providing stable, efficient and reliable power conversion. They are engineered to meet the unique requirements of modern new energy projects with high efficiency, low losses and environmental adaptability.



#### OPTIMIZED FOR RENEWABLE ENERGY

Designed for solar, wind and energy storage applications with high reliability and stability.



#### HIGH EFFICIENCY & ENERGY SAVING

Advanced design for lower no-load loss, low noise and excellent energy efficiency.



#### SAFE & RELIABLE OPERATION

Equipped with comprehensive protection features to ensure stable and secure performance.



#### COMPACT & FLEXIBLE DESIGN

Skid-mounted and modular design for easy installation and integration with new energy systems.



#### LOW MAINTENANCE

Rugged construction with long service life and minimal maintenance requirements.



#### WIDE APPLICATION

Ideal for solar farms, wind power plants, energy storage systems and other new energy projects.



**QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.**



CLEAN  
ENERGY SOLUTIONS



STRICT QUALITY  
CONTROL



BUILT FOR  
A SUSTAINABLE FUTURE



DEDICATED  
SUPPORT

SO FAB TRUST MIDDLE EAST | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia  
T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [Sales@sofab.cc](mailto:Sales@sofab.cc)



# PRODUCT OVERVIEW

# SOFAB

Over 50 Years of Excellence  
in Security Solutions

## 04 NEW ENERGY TRANSFORMER

Transformers designed for renewable energy applications including

## TECHNICAL FEATURES & PERFORMANCE

The **SOFAB Prefabricated Modular Substation** adopts a complete factory-prefabricated design, integrating high-voltage switchgear, transformers, medium- and low-voltage switchgear, auxiliary systems, automation, and environmental control into a compact modular unit.

The equipment is pre-assembled, tested, and commissioned at the factory, allowing faster transportation, installation, and commissioning on site.

### KEY ADVANTAGES

- Factory-prefabricated and pre-tested
- Fast installation and commissioning
- Compact design and reduced footprint
- Lower construction and maintenance costs
- Energy-saving and environmentally friendly
- High reliability and operational efficiency
- Modular and flexible configuration
- Suitable for power, petroleum, chemical, mining, telecommunications, civil construction, and railway projects.

## 04

## PREFABRICATED CABIN SUBSTATION

Prefabricated cabin substations are compact, factory-assembled power distribution solutions designed for fast installation and reliable operation. They integrate medium voltage switchgear, transformer, and low voltage distribution equipment in a single enclosed structure, providing safe, efficient and flexible power supply for various applications.



### COMPACT & PREFABRICATED DESIGN

Factory-assembled modular structure for quick installation and site commissioning.



### INTEGRATED SOLUTION

Combines MV switchgear, transformer and LV distribution equipment in one compact unit.



### SAFE & RELIABLE OPERATION

Designed with complete electrical, mechanical and environmental protection features.



### FLEXIBLE CONFIGURATION

Various layouts and specifications available to meet different project requirements.



### WIDE APPLICATION

Ideal for industrial plants, commercial buildings, renewable energy projects and utility distribution networks.



**QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.**



RELIABLE  
POWER SUPPLY



STRICT QUALITY  
CONTROL



SUITABLE FOR  
VARIOUS APPLICATIONS



DEDICATED  
SUPPORT



SOFAB TRUST MIDDLE EAST | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia  
T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [Sales@sofab.cc](mailto:Sales@sofab.cc)

# PRODUCT OVERVIEW

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 04 NEW ENERGY TRANSFORMER

Transformers designed for renewable energy applications including

## TECHNICAL FEATURES & PERFORMANCE

The **SO FAB Inverter & Step-Up All-in-One Machine** integrates an inverter and step-up transformer into a single power conversion system. It converts DC power into high-voltage AC power for grid connection and high-power applications.

With high conversion efficiency, integrated design, intelligent control, wide input voltage range, and high reliability, it is suitable for photovoltaic, wind power, energy storage, and other renewable energy systems.

### KEY ADVANTAGES

- Factory-prefabricated and pre-tested
- Integrated inverter and step-up transformer
- High conversion efficiency
- Intelligent control
- Wide input voltage range
- Compact and integrated design
- High reliability
- Energy-saving and environmentally friendly
- Suitable for solar PV, wind power, and energy storage systems

## 04

## INTEGRATED INVERTER AND STEP-UP CONVERTER

The integrated inverter and step-up converter is a compact and efficient solution designed to convert low-voltage DC power from renewable energy sources (such as solar PV) into medium-voltage AC power. It integrates inverter, step-up transformer and related equipment into a single unit, providing reliable and high-efficiency power conversion for modern energy applications.



#### INTEGRATED DESIGN

Combines inverter, step-up transformer and auxiliary equipment in one compact unit.



#### HIGH EFFICIENCY

Advanced power conversion technology for maximum energy yield and stable operation.



#### RELIABLE & SAFE OPERATION

Equipped with comprehensive protection functions and intelligent monitoring system.



#### COMPACT & FLEXIBLE

Space-saving design with modular configuration to meet various project requirements.



#### WIDE APPLICATION

Ideal for solar power plants, renewable energy projects and industrial power distribution systems.



**QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.**



RENEWABLE  
ENERGY SOLUTIONS



STRICT QUALITY  
CONTROL



HIGH EFFICIENCY  
PERFORMANCE



DEDICATED  
SUPPORT

SO FAB TRUST MIDDLE EAST | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia  
T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [Sales@sofab.cc](mailto:Sales@sofab.cc)

# PRODUCT OVERVIEW

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 05 SPECIAL TRANSFORMER

Special purpose transformers for industrial, mining, rectifier, furnace, grounding, and other demanding applications.

## TECHNICAL FEATURES & PERFORMANCE

The **SO FAB Dry-Type Mine Transformer** is specially designed for underground mining and other harsh environments. It features explosion-proof, fire-resistant, and moisture-resistant construction, providing stable and reliable operation under demanding conditions.

It is mainly used for power supply and distribution in mines, including underground substations, parking areas, main air intake ducts, and other mining facilities.

### KEY ADVANTAGES

- Explosion-proof design
- Fire and moisture resistant
- Reliable operation in harsh environments
- Suitable for underground mining applications
- Safe and stable power distribution
- Low maintenance requirements

### CONDITIONS OF USE

- Altitude:  $\leq 2,000$  m
- Ambient Temperature:  $\leq +40^{\circ}\text{C}$
- Relative Humidity:  $\leq 95\%$  at  $+25^{\circ}\text{C}$
- Inclination: Vertical inclination  $\leq 15^{\circ}$
- No strong impact, vibration, or corrosive gases/vapors
- Suitable for dry locations without dripping water

# 05

## MINE TRANSFORMER

Mine transformers are specially designed for underground mining applications, providing reliable, safe and efficient power supply in harsh and demanding environments. They are engineered with high-strength insulation and rugged construction to withstand vibration, moisture, dust and other extreme conditions commonly found in mining operations.



#### BUILT FOR TOUGH ENVIRONMENTS

Designed to withstand vibration, moisture, dust and other harsh underground mining conditions.



#### HIGH RELIABILITY

Provides stable and continuous power supply for critical mining equipment and operations.



#### ENHANCED SAFETY

Engineered with comprehensive protection features to ensure safe and secure operation.



#### RUGGED CONSTRUCTION

Heavy-duty design with robust insulation and mechanical strength for long service life.



#### FLEXIBLE CONFIGURATION

Available in various ratings and specifications to meet different mining application requirements.



#### LOW MAINTENANCE

Reliable design with minimal maintenance needs, reducing downtime and operating costs.



**QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.**



RELIABLE  
POWER SUPPLY



STRICT QUALITY  
CONTROL



BUILT FOR  
MINING APPLICATIONS



DEDICATED  
SUPPORT

# PRODUCT OVERVIEW

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 05 SPECIAL TRANSFORMER

Special purpose transformers for industrial, mining, rectifier, furnace, grounding, and other demanding applications.

## TECHNICAL FEATURES & PERFORMANCE

The **SO FAB Buried Transformer** is a compact distribution or combination transformer designed for underground installation. It integrates transformers, high-voltage load switches, and protection fuses within a sealed tank, providing a space-saving and reliable power distribution solution.

It is suitable for underground power distribution and community power supply systems, as well as urban infrastructure such as roads, bridges, tunnels, airports, parks, and other municipal projects.

The system can be configured with prefabricated underground pits and above-ground switchgear, allowing convenient installation while maintaining reliable operation and efficient heat dissipation.

### KEY ADVANTAGES

- Underground and space-saving installation
- Compact integrated design
- Transformer, HV switch & protection fuse integration
- Reliable power distribution
- Suitable for urban and municipal infrastructure
- Prefabricated installation options
- Ideal for roads, tunnels, bridges, airports, parks, and underground power systems

## 05

## BURIED TRANSFORMER

Buried transformers are specially designed for underground installation, providing reliable, safe and space-saving power distribution for urban and commercial areas. They are engineered with high-quality insulation and robust construction to ensure stable performance and long service life in harsh underground environments.



#### DESIGNED FOR UNDERGROUND USE

Specifically engineered for buried installation with high reliability and safety.



#### SPACE SAVING SOLUTION

Ideal for urban areas, commercial establishments and projects where aesthetics and space efficiency are required.



#### HIGH PERFORMANCE

Provides stable and efficient power distribution with low losses and excellent insulation performance.



#### ROBUST & DURABLE

Built with high-quality materials to withstand underground conditions such as moisture, soil pressure and temperature variations.



#### LOW MAINTENANCE

Reliable design with minimal maintenance requirements, ensuring long service life and reduced operating costs.



#### WIDE APPLICATION

Suitable for residential areas, commercial complexes, industrial facilities, infrastructure and smart city projects.



**QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.**



RELIABLE  
POWER SUPPLY



STRICT QUALITY  
CONTROL



IDEAL FOR  
URBAN PROJECTS



DEDICATED  
SUPPORT



# PRODUCT OVERVIEW

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 05 SPECIAL TRANSFORMER

Special purpose transformers for industrial, mining, rectifier, furnace, grounding, and other demanding applications.

## TECHNICAL FEATURES & PERFORMANCE

The **SO FAB Phase-Shifting Rectifier Transformer** is designed to provide multi-phase rectified power for medium- and high-voltage frequency converters. It uses an extended-triangle phase-shifting principle with multiple secondary windings to achieve different rectification pulse numbers, including 9, 12, 15, 18, 24, and

### PERFORMANCE CHARACTERISTICS

- High mechanical strength and short-circuit resistance
- Low noise and compact design
- Easy installation and maintenance-free operation
- High insulation level and low partial discharge
- Excellent moisture, heat-shock, and fire resistance
- Long service life and reliable operation
- Suitable for medium- and high-voltage frequency conversion systems

# 05

## PHASE-SHIFTING RECTIFIER TRANSFORMER

Phase-shifting rectifier transformers are specially designed for industrial rectification and DC power supply applications, providing reliable performance, high efficiency and stable operation in demanding environments.



#### HIGH RELIABILITY

Designed for rectifier and DC power supply applications with stable and continuous operation.



#### EFFICIENT PERFORMANCE

Engineered for low losses, high efficiency and excellent thermal performance.



#### PHASE-SHIFTING DESIGN

Provides the required phase shift for multi-pulse rectifier systems, reducing harmonics and improving power quality.



#### ROBUST CONSTRUCTION

Built with high-quality insulation materials to withstand high thermal, electrical and mechanical stresses in industrial environments.



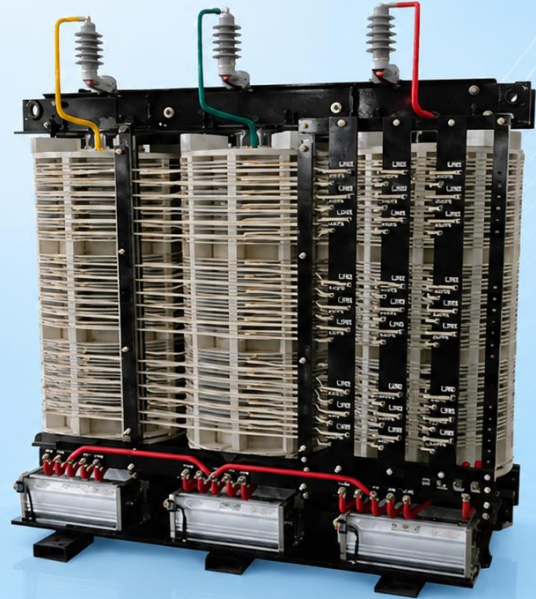
#### LOW MAINTENANCE

Reliable and durable design with minimal maintenance requirements, ensuring long service life.



#### WIDE APPLICATION

Ideal for electrolysis, metal processing, DC drives, traction, industrial power supplies and other heavy-duty rectification systems.



**QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.**



STABLE  
DC POWER SUPPLY



STRICT QUALITY  
CONTROL



BUILT FOR  
INDUSTRIAL APPLICATIONS



DEDICATED  
SUPPORT



**SOFAB TRUST MIDDLE EAST** | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia  
T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [Sales@sofab.cc](mailto:Sales@sofab.cc)

# PRODUCT OVERVIEW

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 05 SPECIAL TRANSFORMER

Special purpose transformers for industrial, mining, rectifier, furnace, grounding, and other demanding applications.

## TECHNICAL FEATURES & PERFORMANCE

The **SO FAB Resistance Furnace Transformer** is specially designed to provide power for electric resistance furnaces and heating equipment used in applications such as mechanical parts heat treatment, powder metallurgy, and non-ferrous metal processing.

It is available in different configurations depending on furnace requirements. Small-capacity and low-voltage units are typically dry-type transformers, while medium- and large-capacity units are generally oil-immersed with self-cooling or forced oil-circulation cooling. Pulses.

### KEY FEATURES

- Designed for electric resistance furnaces
- Suitable for industrial heating applications
- Available in dry-type and oil-immersed configurations
- Natural or forced cooling options
- Reliable power supply for high-temperature processes
- Suitable for heat treatment, powder metallurgy, and metal processing.

## 05

## ELECTRIC FURNACE TRANSFORMER

Electric furnace transformers are designed to supply stable and high-current power for electric melting furnaces and other high-temperature industrial applications. They are built to withstand heavy loads, frequent load changes and harsh operating conditions, ensuring reliable and efficient performance.



#### DESIGNED FOR HEAVY-DUTY APPLICATION

Specifically engineered for electric furnaces and high-power industrial processes.



#### HIGH RELIABILITY

Built to withstand heavy loads, frequent load fluctuations and harsh operating conditions.



#### STABLE PERFORMANCE

Provides consistent and reliable power supply for smooth and efficient furnace operation.



#### RUGGED CONSTRUCTION

Manufactured with high-quality materials for mechanical strength, thermal stability and long service life.



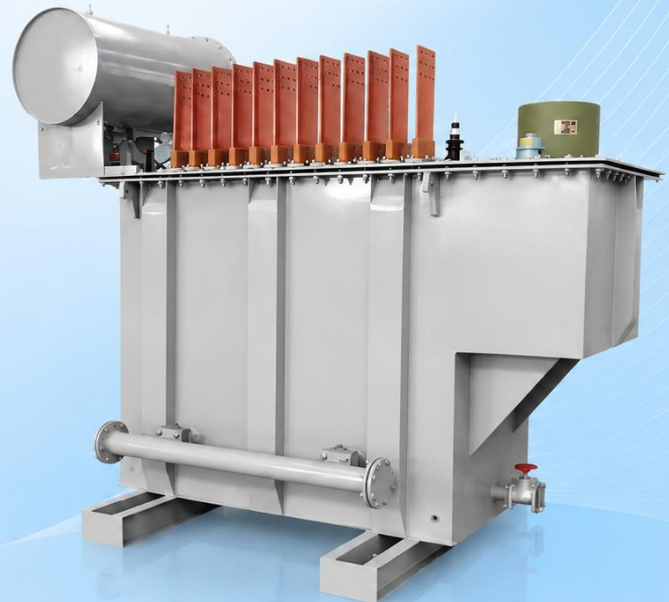
#### LOW MAINTENANCE

Robust design with minimal maintenance requirements, reducing downtime and operating costs.



#### WIDE APPLICATION

Ideal for electric melting furnaces, induction heaters, arc furnaces and other high-temperature industrial applications.



**QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.**



INDUSTRIAL  
POWER SOLUTIONS



STRICT QUALITY  
CONTROL



BUILT FOR  
HEAVY-DUTY USE



DEDICATED  
SUPPORT



SO FAB TRUST MIDDLE EAST | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia

T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [Sales@sofab.cc](mailto:Sales@sofab.cc)

# PRODUCT OVERVIEW

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 05 SPECIAL TRANSFORMER

Special purpose transformers for industrial, mining, rectifier, furnace, grounding, and other demanding applications.

## TECHNICAL FEATURES & PERFORMANCE

The **SO FAB Grounding Transformer** provides an artificial neutral point for electrical systems without a neutral point, enabling reliable grounding and improved protection of the distribution network.

It can be supplied in oil-immersed or dry-type configurations and in single-phase or three-phase designs, depending on system requirements. It is suitable for arc-suppression coil or low-resistance grounding systems to help reduce ground-fault current and improve power supply reliability.

### KEY FEATURES

- Provides an artificial neutral point
- Single-phase and three-phase options
- Oil-immersed or dry-type configurations
- Compatible with arc-suppression and low-resistance grounding
- Reduces ground-fault current
- Improves distribution system reliability
- Suitable for medium-voltage power distribution systems

## 05

## GROUNDING TRANSFORMER

Grounding transformers are designed to provide a neutral grounding point for electrical power systems, ensuring safety, stability and reliable operation. They are commonly used to limit ground fault currents and protect equipment in industrial, commercial and utility applications.



#### ENHANCED SYSTEM SAFETY

Provides a neutral grounding point to limit ground fault currents and enhance power system safety.



#### RELIABLE PERFORMANCE

Designed for stable and continuous operation in various power distribution networks.



#### ROBUST INSULATION

Built with high-quality insulation materials to withstand electrical, thermal and mechanical stresses.



#### COMPACT & DURABLE DESIGN

Space-efficient design with rugged construction for long service life.



#### LOW MAINTENANCE

Designed for minimal maintenance requirements, reducing downtime and operating costs.



#### WIDE APPLICATION

Ideal for industrial plants, commercial facilities, utilities and other power systems requiring a grounded neutral.



**QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.**



RELIABLE  
POWER SOLUTIONS



STRICT QUALITY  
CONTROL



BUILT FOR  
INDUSTRIAL APPLICATIONS



DEDICATED  
SUPPORT



SO FAB TRUST MIDDLE EAST | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia

T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [Sales@sofab.cc](mailto:Sales@sofab.cc)

# PRODUCT OVERVIEW

# SOFAB

Over 50 Years of Excellence  
in Security Solutions

## 05 SPECIAL TRANSFORMER

Special purpose transformers for industrial, mining, rectifier, furnace, grounding, and other demanding applications.

## TECHNICAL FEATURES & PERFORMANCE

The **SOFAB SF26/SG Three-Phase Dry-Type Isolation Transformer** is an energy-saving transformer designed to provide electrical isolation and reliable power conversion. It is available from 300VA to 1600KVA and is manufactured in accordance with IEC439, GB5226, and other applicable international and national standards.

It is suitable for AC 50–60Hz systems with voltage below 2000V, providing reliable isolation and stable power for a wide range of applications.

### KEY FEATURES

- Three-phase dry-type isolation design
- Energy-saving and highly efficient
- High insulation performance
- Safe and reliable electrical isolation
- Capacity range: 300VA–1600KVA
- Suitable for 50–60Hz AC systems
- Ideal for industrial equipment, precision machinery, medical equipment, rectifiers, electronic devices, lighting, and other critical applications.

## 05

## OSG/SG THREE-PHASE DRY ISOLATION TRANSFORMER

Designed to provide galvanic isolation and stable three-phase power for commercial and industrial applications.



# PRODUCT OVERVIEW

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 06 EXPORT TRANSFORMER (CUSTOMIZABLE)

Special purpose transformers for industrial, mining, rectifier, furnace, grounding, and other demanding applications.

### TECHNICAL FEATURES & PERFORMANCE

The **SO FAB Three-Phase Pad-Mounted Transformer** is a compact power distribution solution designed for utility, commercial, and industrial applications. Its compact structure, full insulation, excellent sealing, corrosion resistance, and flexible configuration provide safe and energy-efficient power distribution.

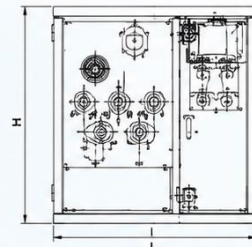
The transformer can be installed indoors or outdoors and is available in various configurations and accessories to meet different application requirements.

#### KEY FEATURES

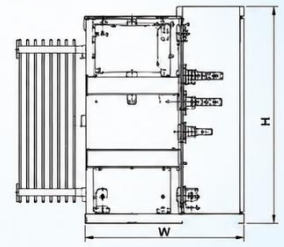
- Compact and space-saving design
- Fully insulated and well-sealed
- Strong corrosion resistance
- Indoor and outdoor installation
- Flexible configuration and accessories
- Safe and energy-efficient operation
- Suitable for utility, commercial, and industrial applications

## 06

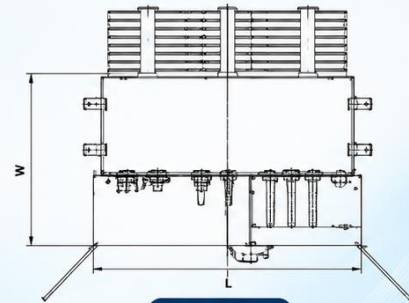
## THREE-PHASE PAD-MOUNTED TRANSFORMER



FRONT VIEW



SIDE VIEW



TOP VIEW



#### RELIABLE POWER SUPPLY

Designed for stable and continuous three-phase power distribution.



#### RUGGED & WEATHER-RESISTANT

Pad-mounted design suitable for outdoor and underground installation.



#### SAFE & EFFICIENT OPERATION

Built with advanced protection features for safe and reliable performance.



#### COMPACT DESIGN

Space-saving structure ideal for commercial, industrial and utility applications.



**QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.**



STABLE  
POWER DISTRIBUTION



BUILT FOR  
HARSH ENVIRONMENTS



IDEAL FOR  
COMMERCIAL & INDUSTRIAL USE



DEDICATED  
SUPPORT



SO FAB TRUST MIDDLE EAST | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia

T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [Sales@sofab.cc](mailto:Sales@sofab.cc)

# PRODUCT OVERVIEW

# SO FAB

Over 50 Years of Excellence  
in Security Solutions

## 06 EXPORT TRANSFORMER (CUSTOMIZABLE)

Special purpose transformers for industrial, mining, rectifier, furnace, grounding, and other demanding applications.

## TECHNICAL FEATURES & PERFORMANCE

The **SO FAB Single-Phase Pad-Mounted Transformer** is designed for applications requiring single-phase power supply, particularly for residential and civil use such as homes and household equipment.

It is available in capacities from 15 to 250 kVA and features a more compact capacity range compared with three-phase pad-mounted transformers.

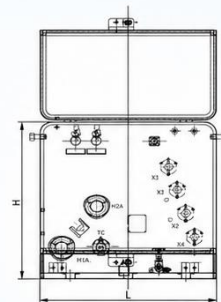
### KEY FEATURES

- Single-phase power supply
- Capacity: 15–250 kVA
- Compact design
- Suitable for residential and civil applications
- Ideal for household and small-scale power distribution

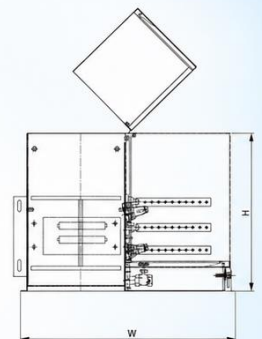
## 07

## SINGLE-PHASE PAD-MOUNTED TRANSFORMER

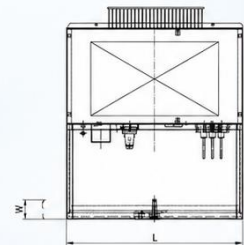
Single-phase pad-mounted transformers are designed to provide safe, reliable and efficient power distribution for residential, commercial and light industrial applications. They offer a compact, weather-resistant design suitable for outdoor installation.



FRONT VIEW



SIDE VIEW



TOP VIEW



#### RELIABLE POWER DISTRIBUTION

Designed for stable and continuous operation.



#### WEATHER-RESISTANT DESIGN

Rugged enclosure suitable for outdoor installation.



#### COMPACT & EFFICIENT

Space-saving design ideal for residential, commercial and light industrial use.



#### LOW MAINTENANCE

Built for long service life with minimal maintenance requirements.



**QUALITY YOU CAN TRUST.  
POWER YOU CAN RELY ON.**



RESIDENTIAL  
APPLICATIONS



COMMERCIAL  
APPLICATIONS



INDUSTRIAL  
APPLICATIONS



DEDICATED  
SUPPORT

**POWERING YOUR PROJECT. SUPPORTING  
YOUR SUCCESS.**



Over 50 Years of Excellence  
in Security Solutions

## **WHY CHOOSE SOFAB?**

Quality Products. Professional Service. Reliable Support.

At **SOFAB**, we provide more than transformer supply. We support our clients throughout the project lifecycle from product selection and technical coordination to delivery, installation, commissioning, and after-sales service.

Our commitment is to provide reliable solutions, responsive support, and professional service that help ensure the safe, efficient, and long-term operation of your power systems.

## **OUR SERVICES & SUPPORT**

### **01 | PROJECT & TECHNICAL SUPPORT**

Professional assistance in product selection, technical requirements, specifications, and project coordination.

### **02 | SUPPLY & DELIVERY**

Reliable supply and coordinated delivery to meet project requirements and schedules.

### **03 | INSTALLATION & COMMISSIONING**

Professional support for installation, testing, commissioning, and system handover.

### **04 | AFTER-SALES SERVICE**

Responsive technical assistance for troubleshooting, inspection, maintenance, and service requirements.

### **05 | MAINTENANCE & TROUBLESHOOTING**

Support to maintain transformer performance, reliability, and safe operation throughout its service life.

### **06 | LONG-TERM PARTNERSHIP**

We remain committed to supporting our clients beyond project completion, building lasting relationships through dependable service and technical support.

## **OUR COMMITMENT**

More Than a Supplier. Your Long-Term Power Solutions Partner.

We are committed to delivering reliable products, professional service, and responsive technical support at every stage of your project.

SOFAB Security Systems

Reliable Power Solutions • Professional Service • Long-Term Support



**SOFAB TRUST MIDDLE EAST** | Aisha Umm Al Muminin Street, Ar Rawdah District, Unit 1, Building 2216, 23435 Jeddah, Saudi Arabia  
T: +966 12 691 9043 / +966 12 658 7039 | M / WhatsApp: +966 53 921 2922 | E: [help@sofab.cc](mailto:help@sofab.cc) / [Sales@sofab.cc](mailto:Sales@sofab.cc)