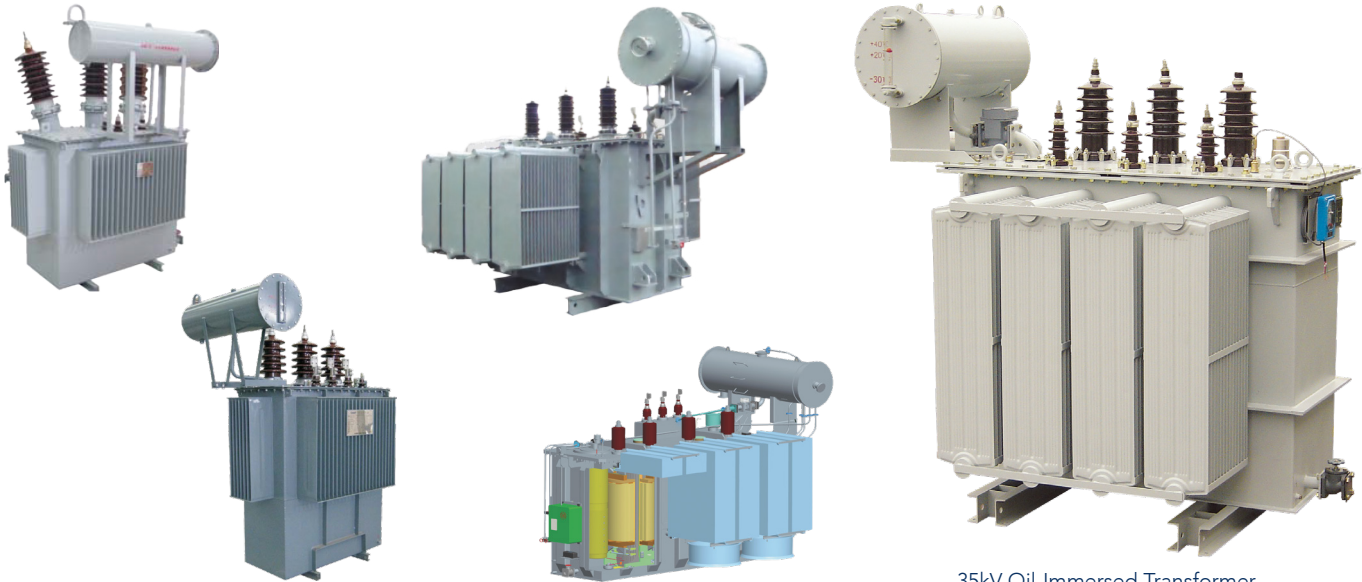




## 35KV POWER TRANSFORMERS



35kV Oil-Immersed Transformer

### Applications:

GRID offers custom-built 35kV power transformers that are primarily used in utility substations, industrial facilities, and renewable energy projects to step up or step down voltage for efficient power distribution. These transformers are also used in commercial complexes and data centers for medium-voltage power for critical infrastructure and grid stability.

### Features:

- **Premium Durability:** Superior insulation and mechanical resilience allow for extended system life and overall system reliability – reducing the frequency of outages.
- **Certified Quality:** Oil-immersed power transformers are manufactured, tested and delivered in accordance with all applicable standards (ANSI, IEEE) maintaining US compliance which simplifies service and retrofitting.
- **Energy Efficient:** Designed to accommodate heavier base loading for extended periods of time with low energy loss and minimal partial discharge for optimized energy savings.

### Working Conditions:

- Max. ambient temperature: +40°C
- Min. temperature: -30°C (outdoor installation)
- No corrosive gas, no obvious dirt, etc.
- Altitude:  $\leq 1000\text{m}$
- Relative humidity:  $\leq 90\%$  (25°C) (without condensation)
- Customized engineering available on request

### Lead Time:

Approximately **12 weeks** after drawings approved.



*\*Photos shown for visual reference only—actual product specifications may vary based on manufacturing and order requirements.*

# 35KV POWER TRANSFORMERS

## Oil-Immersed Non-excited Voltage Regulating Transformer Specifications

| Voltage Combination |              |         | Connection Symbol | Short Circuit Impedance (UK%) | Rated Capacity (kVA) | No-load Loss P0 (kW) | Load Loss Pk (kW) at 75°C | No-load Current (I0%) |
|---------------------|--------------|---------|-------------------|-------------------------------|----------------------|----------------------|---------------------------|-----------------------|
| HV (kV)             | HV Tap Range | LV (kV) |                   |                               |                      |                      |                           |                       |
| 35 ~<br>38.5        | ±5%          | 0.4     | Dyn11             | 6.5%                          | 50                   | 0.16                 | 1.20                      | 1.30                  |
|                     |              |         |                   |                               | 100                  | 0.23                 | 2.01                      | 1.10                  |
|                     |              |         |                   |                               | 125                  | 0.27                 | 2.37                      | 1.10                  |
|                     |              |         |                   |                               | 160                  | 0.28                 | 2.82                      | 1.00                  |
|                     |              |         |                   |                               | 200                  | 0.34                 | 3.32                      | 1.00                  |
|                     |              |         |                   |                               | 250                  | 0.40                 | 3.95                      | 0.95                  |
|                     |              |         |                   |                               | 315                  | 0.48                 | 4.75                      | 0.95                  |
|                     |              |         |                   |                               | 400                  | 0.58                 | 5.74                      | 0.85                  |
|                     | ±2x2.5%      | 0.4     | Yyn0              | 6.5%                          | 500                  | 0.68                 | 6.91                      | 0.85                  |
|                     |              |         |                   |                               | 630                  | 0.83                 | 7.86                      | 0.65                  |
|                     |              |         |                   |                               | 800                  | 0.98                 | 9.40                      | 0.65                  |
|                     |              |         |                   |                               | 1000                 | 1.15                 | 11.50                     | 0.65                  |
|                     |              |         |                   |                               | 1250                 | 1.40                 | 13.90                     | 0.60                  |
|                     |              |         |                   |                               | 1600                 | 1.69                 | 16.60                     | 0.60                  |
|                     |              |         |                   |                               | 2000                 | 1.99                 | 19.70                     | 0.55                  |
|                     |              |         |                   |                               | 2500                 | 2.36                 | 23.20                     | 0.55                  |
| 35 ~<br>38.5        | ±5%          | 3.15    | Yd11              | 6.5%                          | 630                  | 0.83                 | 7.86                      | 0.65                  |
|                     |              |         |                   |                               | 800                  | 0.98                 | 9.40                      | 0.65                  |
|                     |              |         |                   |                               | 1000                 | 1.15                 | 11.50                     | 0.65                  |
|                     |              |         |                   |                               | 1250                 | 1.40                 | 13.90                     | 0.65                  |
|                     |              |         |                   |                               | 1600                 | 1.69                 | 16.60                     | 0.55                  |
|                     |              |         |                   |                               | 2000                 | 2.17                 | 18.30                     | 0.45                  |
|                     |              |         |                   |                               | 2500                 | 2.56                 | 19.60                     | 0.45                  |
|                     |              |         |                   |                               | 3150                 | 3.04                 | 23.00                     | 0.45                  |
|                     |              |         |                   |                               | 4000                 | 3.61                 | 27.30                     | 0.45                  |
|                     |              |         |                   |                               | 5000                 | 4.32                 | 31.30                     | 0.45                  |
|                     | ±2x2.5%      | 6.6     | YNd11             | 8.0%                          | 6300                 | 5.24                 | 35.00                     | 0.45                  |
|                     |              |         |                   |                               | 8000                 | 7.20                 | 38.40                     | 0.35                  |
|                     |              |         |                   |                               | 10000                | 8.70                 | 45.30                     | 0.35                  |
|                     |              |         |                   |                               | 12500                | 10.00                | 53.80                     | 0.30                  |
|                     |              |         |                   |                               | 16000                | 12.10                | 65.80                     | 0.30                  |
|                     |              |         |                   | 20000                         | 14.40                | 79.50                | 0.30                      |                       |
|                     |              |         |                   | 10.0%                         | 25000                | 17.00                | 94.00                     | 0.25                  |
|                     |              |         |                   |                               | 31500                | 20.20                | 112.00                    | 0.25                  |
|                     |              |         |                   |                               | 40000                | 25.90                | 150.00                    | 0.25                  |
|                     |              |         |                   |                               | 50000                | 29.40                | 210.00                    | 0.25                  |
| 63000               | 31.20        | 250.00  | 0.20              |                               |                      |                      |                           |                       |
|                     |              |         |                   | 75000                         | 33.40                | 300.00               | 0.20                      |                       |

## Oil-Immersed On Load Tap Changer Specifications

| Voltage Combination |              | Connection Symbol | Short Circuit Impedance (UK%) | Rated Capacity (kVA) | No-load Loss P0 (kW) | Load Loss Pk (kW) at 75°C | No-load Current (I0%) |
|---------------------|--------------|-------------------|-------------------------------|----------------------|----------------------|---------------------------|-----------------------|
| HV (kV)             | HV Tap Range |                   |                               |                      |                      |                           |                       |
| 35 ~<br>38.5        | ±3x2.5%      | Yd11              | 6.5%                          | 2000                 | 2.30                 | 19.20                     | 0.50                  |
|                     |              |                   |                               | 2500                 | 2.72                 | 20.60                     | 0.50                  |
|                     |              |                   | 7.0%                          | 3150                 | 3.23                 | 24.70                     | 0.50                  |
|                     |              |                   |                               | 4000                 | 3.87                 | 29.10                     | 0.50                  |
|                     |              |                   | 7.5%                          | 5000                 | 4.64                 | 34.20                     | 0.50                  |
|                     |              |                   |                               | 6300                 | 5.63                 | 36.70                     | 0.50                  |
|                     |              |                   | 8.0%                          | 8000                 | 7.87                 | 40.60                     | 0.40                  |
|                     |              |                   |                               | 10000                | 9.28                 | 48.00                     | 0.40                  |
|                     |              | YNd11             | 8.0%                          | 12500                | 10.90                | 56.80                     | 0.35                  |
|                     |              |                   |                               | 16000                | 13.10                | 70.30                     | 0.35                  |
|                     |              |                   | 8.0%                          | 20000                | 15.60                | 82.70                     | 0.30                  |
|                     |              |                   |                               | 25000                | 18.30                | 97.80                     | 0.30                  |
|                     |              |                   | 10.0%                         | 31500                | 21.80                | 116.00                    | 0.30                  |
|                     |              |                   |                               | 40000                | 26.20                | 139.00                    | 0.30                  |

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