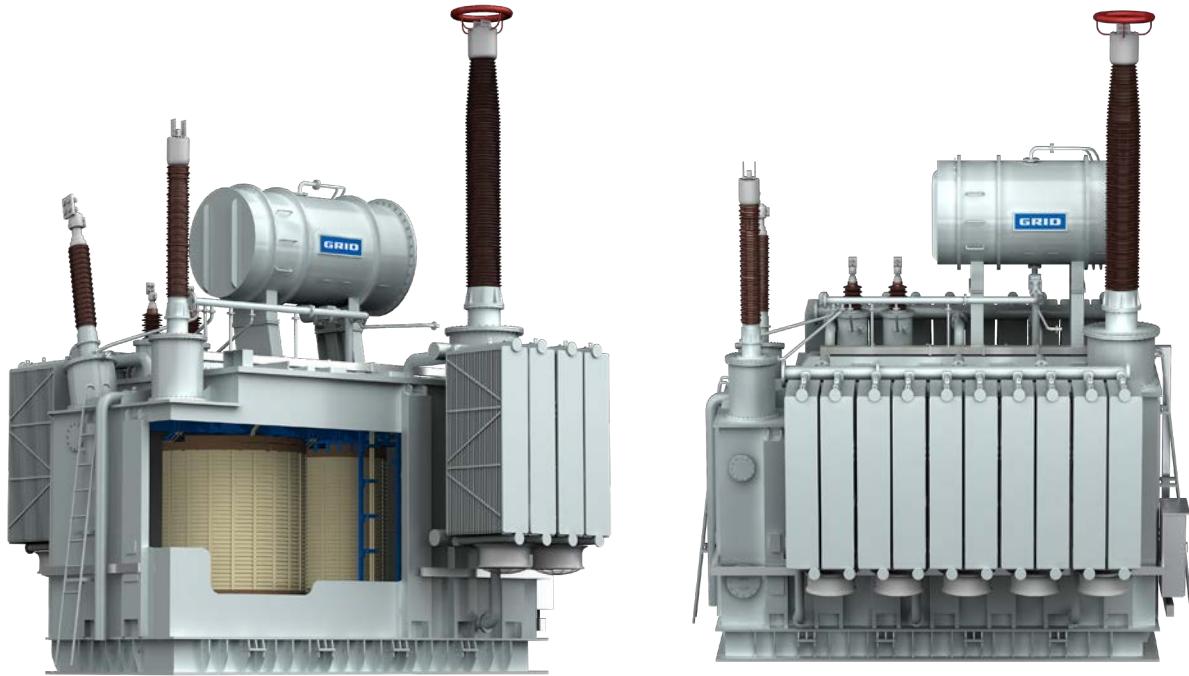




## 500KV POWER TRANSFORMERS



### Applications:

GRID offers custom-built 500kV power transformers that are critical for high-voltage transmission networks, efficiently stepping up or stepping down power for long-distance bulk electricity transfer. They are primarily used in major utility substations, interregional grid connections, and large-scale power generation plants, ensuring grid stability for high-demand loads.

### 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 our 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.

### Lead Time:

Approximately **9-30 months** after drawings approved.

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

# 500KV POWER TRANSFORMERS

2-Winding Power Transformer							
Rated Capacity (kVA)	Rated Voltage & Tapping Range		Vector Group	No-load Current (%)	No-load Losses (kW)	On-Load Losses (kW)	Impedance Voltage (UK%)
	HV (kV)	LV (kV)					
240000	500/ $\sqrt{3}$ ±2x2.25%	10.5~20	Ii0	0.2	110	420	14~16
480000	550±2x2.25%	10.5~20	Ynd11	0.2	190	950	14~16

3-Winding OLTC Power Transformer										
Rated Capacity (kVA)	Rated Voltage & Tapping Range	Vector Group	No-load Current (%)	No-load Losses (kW)	On-Load Losses (kW)	Impedance Voltage (UK%)	HV-MV	HV-LV	MV-LV	
	HV (kV)	MV (kV)	LV (kV)							
250000	500/ $\sqrt{3}$	242/ $\sqrt{3}$ ±8x1.25%	Ia0i0	0.2	70	370	11~12	34~38	20~24	
334000	500/ $\sqrt{3}$	242/ $\sqrt{3}$ ±8x1.25%	Ia0i0	0.15	95	485	11~12	34~38	20~24	

## Working Conditions:

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



## GRID INFRASTRUCTURE SOLUTIONS

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