

TRANSFORMER TEST CONVERTER ST Series 100 kVA-10 MVA



- Adjustable Output Voltage 5-520V (Remote Monitoring and Control Optional)
- Selectable Output Frequency (40-50-60-150-200Hz)
- High Insulation with Isolated Output Transformer

Overview

The Transformer Test Converter is used to meet the required grid standard for testing transformers according to the necessary frequency and voltage standards.

System Operation

The Transformer Test Converter consists of one or more rectifier and inverter modules made up of modular power electronics components. The system has a double-conversion structure, where the AC voltage is first converted to filtered DC voltage by the rectifier module, and then the inverter module converts this filtered DC voltage to the AC frequency and voltage standard required by the load.

Features

- Modular structure providing high reliability and fast maintenance
- Low cost
- Minimal spare parts requirement

Main Features

- Up to 10 MVA supply capacity with parallel connection
- High-efficiency power conversion
- Clean and pure sine wave output voltage
- High power factor and low current IGBT PWM rectifier structure with regenerative power
- High-reliability operation with modular structure and spare module
- Wide input voltage range of 50/60Hz
- Space-saving design
- Touchscreen with color graphic display
- Wide communication options
- Output cable voltage drop compensation
- Seamless load transfer between sources
- Bidirectional power flow

TECHNICAL SPECIFICATIONS

	100 kVA - 10 MVA
Grid - Input	
Voltage	380 – 480V ±10% (different input voltages with input transformer)
Maximum Supply Voltage	110%
Nominal Input Frequency	50/60Hz
Frequency Tolerance	±15Hz
Grid Standard	3 phase or 3 phase + Neutral
Oversvoltage Category	III
Current Harmonic	<3% THDi (at nominal load)
Power Factor	>0.99
Load - Output	
System Capacity	100kVA to 10 MVA 0.9pf (higher powers with parallel connection)
Voltage	Voltage adjustable in the range of 5-520V (Phase-Phase) ± 2% (Output Voltage Optional).
Frequency (Selectable)	40-50-60-150-200Hz
Voltage Harmonic	<%1.0 THDv (at linear load)
Overload Capacity	120% 10 min. 150% 30 sec.
Short-circuit Rating	200% 2 sec.
Static Voltage Sensitivity	±1%
Frequency Sensitivity	±0.1%
Performance	
Efficiency	96%
General	
Cabinets IP Option	IP20 Cabinet or Rack IP42 Cabinet Only
User Panel	7 inch. Toucpanel with colour TFT
Operating Temperature	0 – 40°C
Cooling	Forced Air Cooling with a fan that speed is adjusted according to the load
Temperature Effect	2% power loss per 1°C up to 50°C above 40°C.
Capacity Derating With Elevation	1% power loss for every 100m up to 2000m over 1000m.
Humidity	<95% without condensation
Aquistic Noise	65-75dBA

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