



DISTRIBUTION TRANSFORMER TEST SYSTEM TTS1000D SERIES

TEST SYSTEM FOR 1-PHASE AND 3-PHASE POWER TRANSFORMERS

These flexible test systems are ideal for the complete routine test of distribution transformers according to IEC60076.

The software controllable power supply provides a 3-phase sinusoidal voltage with adjustable amplitude and frequency.

All test steps are performed with minimum reconnections whereby a high efficiency and safety is achieved.

Automatic testing with test plans for every product and automatic test certificate generation speed up the testing process and improve quality. Our multilingual testing software allows comfortable operation of the whole test system.

The system is equipped with extensive engineered safeguards according to EN50191 to prevent operators from dangerous electrical voltages. The modular concept of the system is future-proof and allows further expansions.

APPLICATION

- Distribution Transformer 3-36kV
Routine Test and Heat-Run Test

TEST STEPS

- No Load Current and Losses
- Short Circuit Voltage and Losses
- Voltage Ratio and Vector Group
- Induced Overvoltage
- Winding Resistance
- Insulation Resistance
- High Voltage
- Heat-Run

KEY FEATURES

- PC controlled test system
- Sine inverter power supply
- Full safety according to EN50191
- Comfortable, multilingual software
- Free configurable test steps

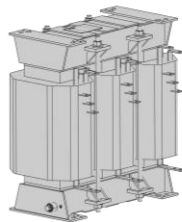
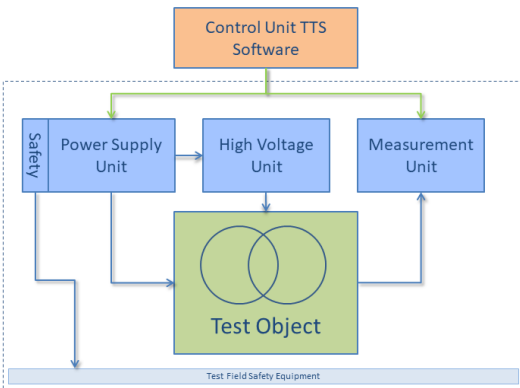
KEY BENEFITS

- Quick testing – High throughput
- Minimum reconnections needed
- Easy and safe operation
- Several reporting and traceability functions
- Test and error statistics
- Adaptions to individual requirements possible

TECHNICAL SPECIFICATIONS

DISTRIBUTION TRANSFORMER TEST SYSTEM TTS1000D SERIES

| Model | TTS1000D | TTS1050D | TTS1100D | TTS1200D |
|--|--|---|--|--|
| Output Power | Without Supply | 54kVA | 108kVA | 216kVA |
| Sine Power Supply Output Power Ranges^{1,2} | - | 250V 125A 500V 63A 750V 42A 1000V 32A 1500V 21A | 250V 250A 500V 125A 750V 84A 1000V 63A 1500V 42A | 250V 500A 500V 250A 1000V 125A 2000V 63A 3000V 42A |
| Transformer Rating Routine Test³ | - | Up to 1MVA 3...36kV 2%...8% | Up to 2MVA 3...36kV 2%...8% | Up to 4MVA 3...36kV 2%...8% |
| Transformer Rating Heatrun Test³ | - | Up to 500kVA 3...24kV 2%...6% | Up to 1MVA 3...24kV 2%...6% | Up to 2MVA 3...36kV 2%...8% |
| Output Frequency | - | 50Hz-400Hz | | |
| Power Measurement | Precision power analyzer, Basic accuracy $\pm 0.01\%$ Rdg + 0.02% Rng | | | |
| Winding Resistance⁴ | 4-wire Measurement, Resolution 1 $\mu\Omega$, Accuracy $\pm 0.03\%$ Rdg + 0.015% Rng | | | |
| Switching Matrix | 8 Connection Points for Automatic Voltage Ratio and 4-Wire Winding Resistance Test | | | |
| High Voltage Test¹ | Separate Unit, 100kVAC, 10kVA 100mA continuous, 20kVA 200mA 1h ON 23h OFF | | | |
| Insulation Resistance | Test voltage 500V, 1000V, Resistances up to 2G Ω | | | |
| Safety Features | Complete plug & play solution for safe testing according to EN50191 Connections for emergency stop buttons, up to 5 safety sensors, warning lamps | | | |
| Power Supply Weight and Dimensions (WxHxD) [mm] | | 1100kg 1200x1900x1200 | 1350kg 1200x1900x1400 | 1960kg 1600x1900x1600 |
| 1) | Customized ranges are available | | 3) | |
| 2) | Ranges for 50...60Hz, output current derating for 60...400Hz | | 4) | |
| | | | Range limits must be considered, please contact Solfas for details | |
| | | | Option for higher resolution available | |



SOLFAS TECHNOLOGIE GMBH

We specialize in the development and distribution of test systems, power supplies and measuring instruments. Experts in electrical testing and automation, our company offers a broad range of high-performance full-service testing solutions and measuring instruments. We provide clients in the automotive, aerospace, energy and traditional industry sectors with the equipment they need to test high power components, such as chokes, transformers and electric motors.