

True Three-phase transformer winding analyzer

Scope of work (SOW)

Supply and deliver 3 x True Three-phase transformer winding analyzer test instrument that can perform the following tests...

Turns ratio
Excitation/Magnetization (open circuit test)
Winding DC resistance
Dynamic resistance measurement (DRM) / Continuity test
Heat run – internal temperature
Dry out – internal temperature
Contact resistance Test
Short circuit impedance (leakage reactance)
Frequency response of stray losses Test
Vector group verification
Demagnetization
Magnetic balance test
Transformer losses / efficiency Test
Capability to set up and test all 3 phases simultaneously
Capability to set up and test an individual phases separately
Included all test leads and connections to perform testing on all 3 phases, on both primary and secondary, without adjusting the test setup

The test instrument must include all test leads, accessories and connections required to perform testing on all 3 phases simultaneously, on both primary and secondary, without adjusting the test setup. The unit must be equipped with an emergency stop button, a dead-man's switch and warning lights.

Test and system control software must be included as part of package. Test reports must be customizable and in accordance with IEC 60076-1 standards. The frequency of periodic calibration must at 2-year intervals or longer. The units must be delivered together with current calibration certificates, issued within the past 3 months from tender closing or later. Local representation and support for this instrument must be available in South Africa with a response time of 48 hours maximum.

Approved by:



Elliot Sithole
Electrical Test Manager