



Al-Ahleia Testing Laboratories



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ABOUT US



Al-Ahleia Testing Laboratories provide a wide range of test services for various electrical equipment.

We offer a comprehensive and practical approach built around international testing standards.

Combining our multidisciplinary expert staff with state of the art testing facilities gives us a unique advantage to help clients assess, test and demonstrate their products and systems.

LOW VOLTAGE SWITCHGEAR & BUS DUCT

Verification of Temperature Rise Test up to 5000A

Verification of Dielectric Properties

- a. Power Frequency Withstand Voltage up to 4.5kV
 - b. Impulse Withstand Voltage up to 20kVp
 - c. Insulation Resistance Test up to 5kV / 950GΩ
-

Verification of Clearance and Creepage Distances

Verification of Degree of Protection up to IP55

Verification of Strength of Materials and Parts
(Lifting) up to 5000kg - Switchgear

Verification of Mechanical Operation - Switchgear

Verification of Structure Strength up to 5000 Kg - L.V
Bus Duct

Verification of Resistance to Crushing up to 5000 Kg
- L.V Bus Duct



SWITCHGEAR LABORATORY



VERIFICATION OF DEGREE OF PROTECTION UP TO IP55



IMPULSE WITH STAND — UP TO 20 KVP



TIGHTNESS TEST OF GAS FILLED SWITCHGEAR



VERIFICATION OF STRENGTH OF MATERIALS AND PARTS (LIFTING) UP TO 5000KG

Al-Ahleia Testing Laboratories conducts various type tests as per international standards.

MEDIUM VOLTAGE SWITCHGEAR & BUS DUCT

Temperature Rise Test up to 5000A

Dielectric Test on main circuit

- a. Power Frequency withstand voltage – up to 110 kV
- b. Impulse withstand voltage – Up to 350 kV peak
- c. Insulation resistance test – Up to 5 kV/ 950 GΩ

Dielectric test on auxiliary and control circuit

- a. Power Frequency withstand voltage – Up to 4.5 kV
- b. Insulation resistance test – Up to 5 kV / 950 GΩ

Verification of Degree of Protection up to IP55

Measurement of resistance of main circuit - Switchgear

Mechanical Operation & Endurance Test - Switchgear

Partial Discharge Test - Switchgear

Tests to Prove the Strength of Gas Filled Compartment
up to 6 bar Gauge Pressure - Switchgear

Tightness Test of Gas Filled Switchgear - Switchgear



SWITCHGEAR LABORATORY



POWER FREQUENCY WITHSTAND VOLTAGE – UP TO 110 KV



VERIFICATION OF DEGREE OF PROTECTION UP TO IP55



PARTIAL DISCHARGE TEST



UKAS ACCREDITATION

Accreditation by UKAS demonstrates the competence, impartiality and performance capability of Al-Ahleia Testing Laboratories.





ASTA RECOGNITION

Al-Ahleia Testing Laboratories are ASTA Recognized as RTL Level 4.

The ASTA Certification provides an independent compliance test certificate accepted by all.


Total Quality. Assured.

Intertek RTL Level 4

ASTA Recognized Laboratory

The following organization has been assessed and found to comply with the relevant requirements of ISO/IEC 17025: 2017 and the Intertek Recognized Laboratory Program Manual and accepted by Intertek as a Level 4 Recognized Testing Laboratory

Al-Ahleia Switchgear Co. K.S.C.C.
P.O. Box 25876
Safat 13119
Kuwait

and is hereby authorised to undertake test work for ASTA certification purposes for the product types and standards identified on the endorsement forming part of this document.

Agreement number	2014-RTL-L4-80
Issue number:	4
Original issue date:	January 2015
Expiry date:	31 December 2026

R.W. Hayward



15 February 2023

Name

Signature

Date



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DISTRIBUTION AND POWER TRANSFORMERS

(OIL FILLED TYPE & CAST RESIN TYPE)

Temperature Rise Test up to 50MVA

Dielectric Test on Main Circuit

- a. Power Frequency Withstand Voltage up to 450kV
 - b. Lightning Impulse Voltage / Chopped Wave up to 900kVp
 - c. Insulation Resistance Test up to 5kV / 950GΩ
-

Induced AC Voltage Test with Partial Discharge Measurement

Sound Level Test

Sweep Frequency Response Analysis

Measurement of Voltage Ratio & Check of Phase Displacement

Measurement of Winding Resistance

Measurement of Oil BDV up to 100kV

Measurement of Dissolved Gases in Oil

Measurement of Capacitance and Tan δ of Oil and Transformer

Hydraulic Pressure Deflection / Pressure Test on Transformer and Cable Box / Vacuum Deflection

Measurement of No Load Loss and Current with Testing Facility of 1000kVA Regulator,
500kVA Intermediate Transformer (33-22-11 kV)

Measurement of Zero Phase Sequence Impedance

Measurement of Short Circuit Impedance and Load Loss with Testing Facility of 1000kVA Regulator,
1000kVA Intermediate Transformer (1.1kV to 11.5kV) and HT Capacitor 16.5 MVAR

Test on On-Load Tap Changer

Leak Testing with Pressure for Oil Filled Transformer

Verification of Degree of Protection up to IP55

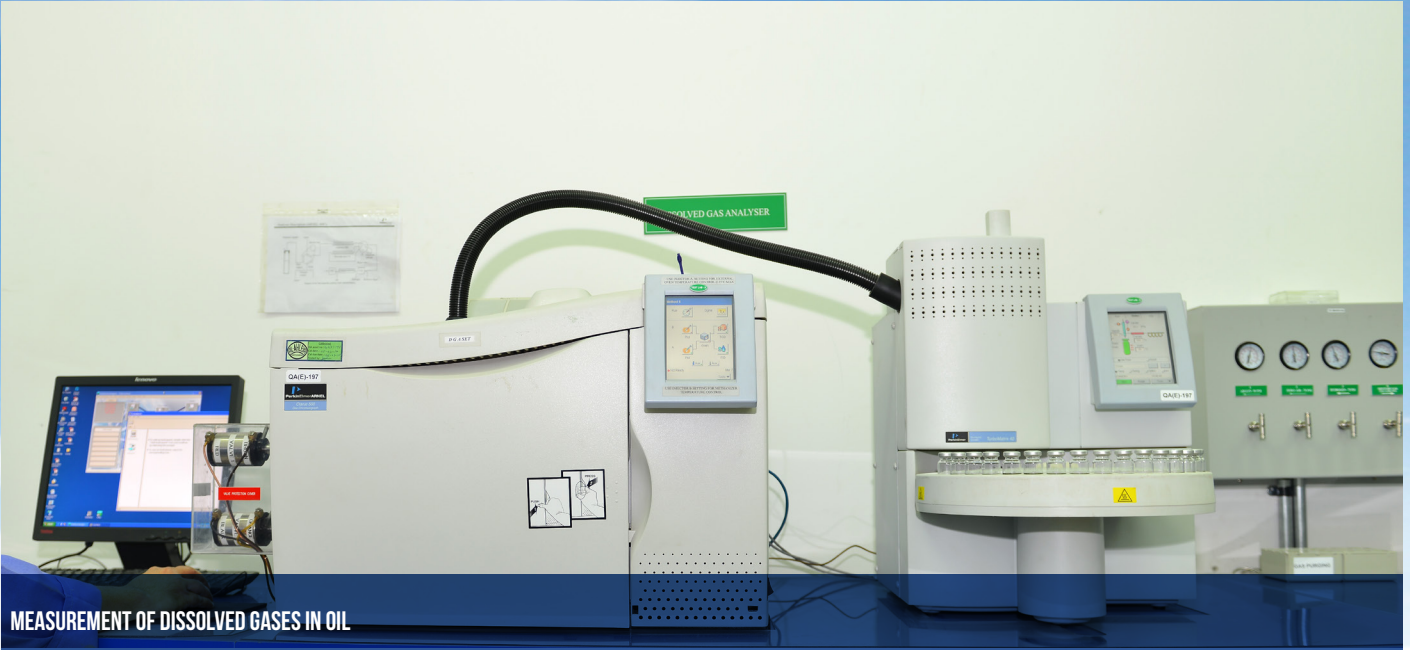
TRANSFORMER LABORATORY



LIGHTNING IMPULSE VOLTAGE / CHOPPED WAVE UP TO 900KVP



LIGHTNING IMPULSE VOLTAGE / CHOPPED WAVE UP TO 900KVP



MEASUREMENT OF DISSOLVED GASES IN OIL



INDUCED AC VOLTAGE TEST (ACSD) WITH PARTIAL DISCHARGE MEASUREMENT



SOUND LEVEL TEST

TRANSFORMER LABORATORY

Al-Ahleia Testing Laboratories is one of the first laboratories in the middle east to be accredited by UKAS (United Kingdom Accreditation Service) & recognized by ASTA (ASTA Recognized Laboratory / Intertek).



SWEEP FREQUENCY RESPONSE ANALYSIS

TRANSFORMER LABORATORY



MEASUREMENT OF CAPACITANCE AND $\tan \delta$ OF OIL AND TRANSFORMER

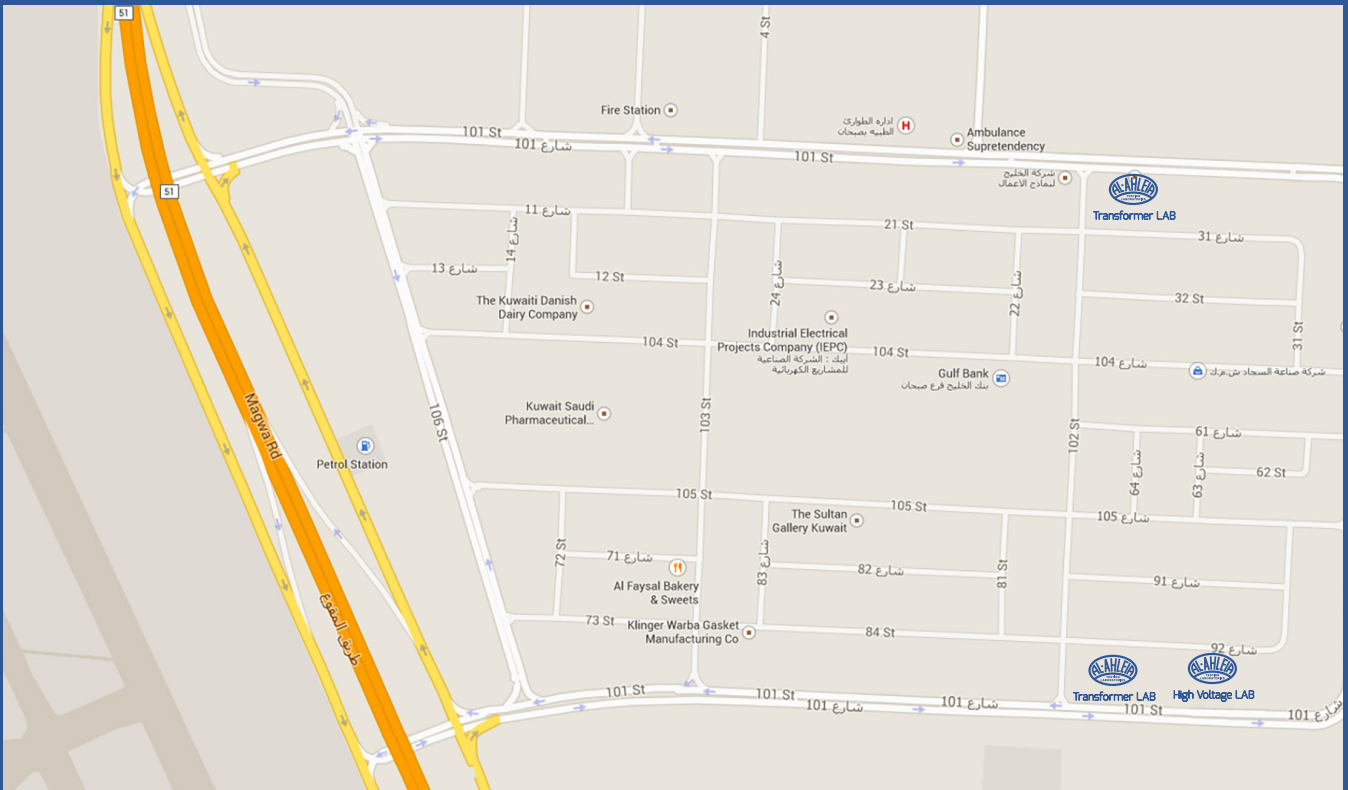


TEMPERATURE RISE TEST UP TO 50MVA



MEASUREMENT OF SHORT CIRCUIT IMPEDANCE AND LOAD LOSS WITH TESTING FACILITY OF 1000KVA REGULATOR, 1000KVA INTERMEDIATE TRANSFORMER (1.1KV TO 11.5KV) AND HT CAPACITOR 16.5 MVAR

OUR TEAM





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