



ACCREDITATION CERTIFICATE

LB-TEST-246

Emirates International Accreditation Centre

has accredited

DUBAI ELECTRICITY AND WATER AUTHORITY PJSC

DISTRIBUTION ASSET MANAGEMENT-CABLE LAB

Al Ruwayyah | Dubai | United Arab Emirates

In accordance with the requirements of

ISO/IEC 17025:2017

General requirements for the competence of testing and calibration laboratories

to undertake the tests in the attached accreditation scope

This Accreditation is invalid without the attached accreditation scope and shall remain in force within the validity period printed below, subject to continuing compliance with the requirements of the accreditation criteria.

Validity: 28-04-2025 to 27-04-2028

Initial Accreditation Date: 28-04-2022



Amina Ahmed Mohammed
CHIEF EXECUTIVE OFFICER



Accreditation Scope
LB-TEST-246

Dubai Electricity and Water Authority PJSC
Distribution Asset Management-Cable Lab

Al Ruwayyah | Dubai | United Arab Emirates

Date: 28-04-2025

| Accreditation History | | |
|-----------------------|---|------------|
| Issue no. | Details | Date |
| 03 | Reissued due to renewal of accreditation | 28-04-2025 |
| 02 | Reissued due to the extension in scope and test methods for some tests | 13-05-2024 |
| 01 | Granted accreditation from Emirates International Accreditation Centre 'EIAC' | 28-04-2022 |

Accreditation Scope
Electrical Testing
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Issue no.: 03

Date: 28-04-2025

Valid to: 27-04-2028

| Type of Activity | Test Materials/Products | Test Name | Test Method |
|------------------|---|---|---|
| Electrical | Power cables with extruded insulation and their accessories for rated voltages from 1 kV (Um = 1,2 kV) up to 30 kV (Um = 36 kV) Part 1: Cables for rated voltages of 1 kV (Um = 1,2 kV) and 3 kV (Um = 3,6 kV) Part 2: Cables for rated voltages from 6 kV (Um = 7, 2 kV) up to 30 kV (Um = 36 kV). | Conductor Resistance Test/ Armour Resistance | IEC 60502 Part2 Clause 16.2 IEC 60502 Part 1 Clause 15.2 |

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| | | Resistivity of semi-conducting screens | IEC 60502 Part 2 Clause 18.2.10 |
| | | Heat cycle test/Load cycle test | IEC 60502 Part 2 Clause 18.2.7 |
| | | Lightning impulse withstand test | IEC 60502 Part 2 Clause 18.2.8 |

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| Non-Electrical -Thermal | Power cables with extruded insulation and their accessories for rated voltages from 1 kV ($U_m = 1,2 \text{ kV}$) up to 30 kV ($U_m = 36 \text{ kV}$) | Hot set test for EPR, HEPR and XLPE insulation and elastomeric sheaths | IEC 60502 Part 1 Clause 18.12, Clause 16.9 IEC 60502 Clause 17.10 IEC 60811-507 |
| Non-Electrical - Dimension | Part 1: Cables for rated voltages of 1 kV ($U_m = 1,2 \text{ kV}$) and 3 kV ($U_m = 3,6 \text{ kV}$) Part 2: Cables for rated voltages from 6 kV ($U_m = 7, 2 \text{ kV}$) up to 30 kV ($U_m = 36 \text{ kV}$). | Thickness & Diameter | IEC 60502 Part 1 Clauses: 16.5,16.7,16.8 IEC 60502 Part 2 Clauses 17.5, 17.7, 17.8 IEC 60811-201 IEC 60811-202 |
| Electrical Test: High Voltage DC withstand test | MV cables | Electrical - High voltage Direct Voltage | IEC 60502 Part 2 Clause 16.5 |

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|--|---|---|---|
| Electrical Test: Measuring Capacitance/ Tandelta | MV cables | Capacitance /Tan delta measurement | IEC 60502 Part 2 Clause 18.2.6 |
| Non-Electrical - Tensile Test | MV cables | Mecahanical / Tensile Test | IEC 60502 Part 2 Clause 19 |
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| | | Additional ageing test on pieces of completed cables | IEC 60502 Part 1 Clause 18.6 IEC 60502 Clause 19.7 IEC 60811-501 IEC 60811-401 |

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| | | Pressure test at high temperature on insulation and non-metallic sheaths | IEC 60502 Part 1 Clause 18.7 IEC 60502 Clause 19.9 IEC 60811-508 |
| | | Test for resistance of PVC insulation and sheaths to cracking (heat shock test) | IEC 60502 Part 1 Clause 18.10 IEC 60502 Clause 19.11 IEC 60811-509 |
| | | Shrinkage test for XLPE insulation | IEC 60502 Part 1 Clause 18.17 IEC 60502 Clause 19.18 IEC 60811-502 |

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| | | Water absorption (Gravimetric) on insulation | IEC 60502 Part 1 Clause 8.14 IEC 60502 Clause 19.15 IEC 60811-402 |
| | | Measurement of carbon black content of black PE oversheaths | IEC 60502 Part 1 Clause 18.16 IEC 60502 Clause 19.17 IEC 60811-605 |
| Non Electrical- others | Part 2: Cables for rated voltages from 6 kV (Um = 7, 2 kV) up to 30 kV (Um = 36 kV). | Bending Test | IEC 60502 Part 2 Clause 18.2.4 |
| | | Test on PVC insulation and sheaths and halogen free sheaths at low temperatures | IEC 60502 Part 1 Clause 18.9 IEC 60502 Clause 19.10 IEC 60811-504 IEC 60811-505 IEC 60811-506 |

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| | | Strippability test for insulation screen | IEC 60502 Clause 19.23 |
| | | Flame spread test on single cables | IEC 60502 Part 1 Clause 18.15 IEC 60502 Clause 19.16 IEC 60332-1-2 |