



Kenya Power

**SPECIFICATION FOR SCREENING EFFICIENCY TESTER FOR CONDUCTIVE SUITS
FOR LIVE-LINE WORK**

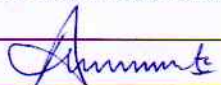
A Document of the Kenya Power & Lighting Plc

October 19, 2026

 Kenya Power	TITLE: SCREENING EFFICIENCY TESTER FOR CONDUCTIVE SUITS	Doc. No.	NO.KP1/7B.2/TSM/ST/09/015-1
		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 1 of 19

Table of Contents

0.1 Circulation List.....	2
0.2 Amendment Record.....	3
0.3 Foreword.....	4
1. SCOPE.....	5
2. NORMATIVE REFERENCES	5
3. DEFINITIONS AND ABBREVIATIONS	5
3.1 Abbreviations	5
3.2 Definitions	6
4. REQUIREMENTS	6
4.1 Service Conditions.....	6
4.2 Design and Construction	7
4.3 Measuring Function.....	7
4.4 Test Fixture and Accessories.....	8
4.5 Display, Data Storage and Interface	8
4.6 Power Supply.....	8
4.7 Safety and Electromagnetic Compatibility	9
4.8 Calibration	9
4.9 Enclosure and Weight.....	9
4.10 Technical Particulars	9
5. TEST REQUIREMENTS.....	10
6. MARKING AND PACKING.....	11
6.1 Marking	11
6.2 Packing	11
7. WARRANTY	12
8. TRAINING.....	12
8.1 Training at the manufacturer's premises	12
8.2 Local Training	12
APPENDICES	14
A: TESTS AND INSPECTION (Normative).....	14
B: QUALITY MANAGEMENT SYSTEM (Normative)	14
C: TECHNICAL DOCUMENTATION (Normative).....	14

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Signed: 	Signed: 
Date: 2026-10-19	Date: 2026-10-19

	TITLE: SCREENING EFFICIENCY TESTER FOR CONDUCTIVE SUITS	Doc. No.	NO.KP1/7B.2/TSM/ST/09/015-1
		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 2 of 19

0.1 Circulation List

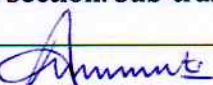
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2	Manager, Transmission, Central Office.

REVISION OF KPLC STANDARDS

To keep abreast of progress in the industry, KPLC Standards shall be regularly reviewed. Suggestions for improvements to approved Standards, addressed to the Manager, Standards Department, are welcome.

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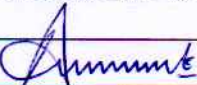
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		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 3 of 19

0.2 Amendment Record

Rev No.	Date (YYYY-MM-DD)	Description of Change	Prepared by (Name & Signature)	Approved by (Name & Signature)
0	2026-10-19	New issue	Eng. Alistair Akute	Eng. George Korir

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Signed: 	Signed: 
Date: 2026-10-19	Date: 2026-10-19

	TITLE: SCREENING EFFICIENCY TESTER FOR CONDUCTIVE SUITS	Doc. No.	NO.KP1/7B.2/TSM/ST/09/015-1
		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 4 of 19

0.3 Foreword

This specification has been prepared by the Transmission Department and Live Line Section, of The Kenya Power and Lighting Company Plc. The specification lays down requirements for the Strain Link Stick, the Spiral Link Stick and the Roller Link Stick for Live-Line Work. It is intended to be used by KPLC live-line teams to support, hold, spread and move energized conductors on 66 kV to 220 kV overhead lines.

Live-line working avoids planned outages, which shortens the time customers are without supply and improves network performance indices such as SAIDI (System Average Interruption Duration Index). A conductive suit shields the lineman from the electric field of the energised line and carries the induced current safely. The conductive fibres in the suit can be damaged by wear, washing, folding, burns and broken seams, and the suit then no longer protects the wearer. A suit therefore has to be tested before it is issued, and periodically while in service, and the result has to be repeatable and traceable.

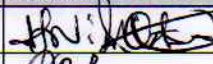
This specification therefore stipulates the minimum requirements for the measuring performance, safety, calibration, data recording, packing, testing, warranty and training of screening efficiency testers that are acceptable for use on the KPLC power network. The tester shall be used in the live-line workshop, in test laboratories and in field vehicles.

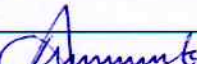
There are no other specifications in this series.

It shall be the responsibility of the suppliers and manufacturers to ensure that the offered design is of the highest quality and guarantees excellent service to KPLC, good workmanship and good engineering practice in the manufacture of the screening efficiency tester.

Users of Kenya Power specifications are responsible for their correct interpretation and application.

The following are members of the team that developed this specification:

Name	Department	Signature	Date
Nicodemus Ondigo Otoro	Transmission		19/10/2026
Callen Buruchara	Distribution / Live Line		19/10/2026

Head of Section: Sub-transmission, Central Office	Head of Department: Transmission, Central Office
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		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 5 of 19

1. SCOPE

- 1.1 This specification covers technical requirements for the screening efficiency tester that shall be used by KPLC live-line teams to test the screening efficiency of conductive suits for work on energised power transmission lines of 66 kV to 220 kV.
- 1.2 The specification covers requirements for design, inspection and tests, packing, warranty and training for the screening efficiency tester and its associated accessories.

2. NORMATIVE REFERENCES

The following standards contain provisions which, through reference in this text, constitute provisions of this specification. For dated editions the cited edition will apply; for undated editions the latest edition of the referenced document shall apply.

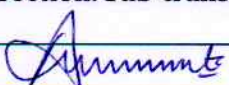
Standard	Title
IEC 60895	Live working – Conductive clothing for use at nominal voltage up to 800 kV a.c. and ± 600 kV d.c.
IEEE 1067	Guide for in-service use, care, maintenance and testing of conductive clothing for use on voltages up to 765 kV a.c. and ± 750 kV d.c.
IEC 61010-1	Safety requirements for electrical equipment for measurement, control and laboratory use – Part 1: General requirements
IEC 61326-1	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements
IEC 61000-4 series	Electromagnetic compatibility (EMC) – Testing and measurement techniques (Parts 4-2, 4-3, 4-4, 4-5, 4-6 and 4-8)
CISPR 32	Electromagnetic compatibility of multimedia equipment – Emission requirements (formerly CISPR 22)
IEC 60529	Degrees of protection provided by enclosures (IP code)
IEC 60068	Environmental testing
IEC 61477	Live working – Minimum requirements for the utilization of tools, devices and equipment
ISO 9001	Quality Management Systems – Requirements
ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories

3. DEFINITIONS AND ABBREVIATIONS

For the purpose of this specification, the definitions and abbreviations given in the reference standards shall apply together with the following.

3.1 Abbreviations

KPLC	Kenya Power and Lighting Company Plc
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Date: 2026-10-19	Date: 2026-10-19

	TITLE: SCREENING EFFICIENCY TESTER FOR CONDUCTIVE SUITS	Doc. No.	NO.KP1/7B.2/TSM/ST/09/015-1
		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 6 of 19

IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
ASTM	American Society for Testing and Materials
IEEE	Institute of Electrical and Electronics Engineers
kV	Kilovolt
Kg	Kilogram
SAIDI	System Average Interruption Duration Index
GTP	Guaranteed Technical Particulars
QAP	Quality Assurance Plan
MAD	Minimum Approach Distance
SE	Screening Efficiency
dB	Decibel
Hz	Hertz
kV/m	Kilovolt per metre
LCD	Liquid Crystal Display
USB	Universal Serial Bus
mA	Milliampere
IP	Ingress Protection
EMC	Electromagnetic Compatibility

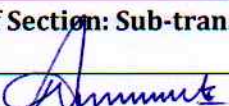
3.2 Definitions

Conductive suit: a suit of conductive clothing (jacket, trousers, hood, gloves and socks) that is worn by a lineman working at or near the potential of an energised line and that shields the wearer from the electric field.

Screening efficiency (SE): the reduction in electric field strength produced by the suit material or garment, expressed as $SE (dB) = 20 \log_{10} (E_0 / E_1)$, or as $SE (\%) = (1 - E_1 / E_0) \times 100$, where E_0 is the field strength measured without the material and E_1 is the field strength measured with the material in place.

Reference sample: a sample of material with a known and certified screening efficiency that is used to check the calibration of the tester.

Test fixture: the holder, frame or stand that positions the sample or garment between the field source and the field sensor.

Head of Section: Sub-transmission, Central Office	Head of Department: Transmission, Central Office
Signed: 	Signed: 
Date: 2026-10-19	Date: 2026-10-19

	TITLE: SCREENING EFFICIENCY TESTER FOR CONDUCTIVE SUITS	Doc. No.	NO.KP1/7B.2/TSM/ST/09/015-1
		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 7 of 19

4. REQUIREMENTS

4.1 Service Conditions

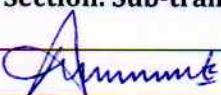
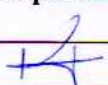
- 4.1.1 The screening efficiency tester shall be suitable for use in workshops, laboratories and live-line vehicles in tropical areas, and for transport over rough roads, including areas exposed to:
- a) Altitudes of up to 2200 m above sea level;
 - b) Humidity of up to 90%;
 - c) Average ambient temperature of +30 °C with a minimum of -1 °C and a maximum of +40 °C;
 - d) Dust, and vibration and shock during transport.
- 4.1.2 The tester shall be used to test conductive suits for live-line work on 66 kV, 132 kV and 220 kV transmission lines at 50 Hz . The suit class to be tested shall be specified for each tender.

4.2 Design and Construction

- 4.2.1 The screening efficiency tester shall be designed, manufactured and tested in accordance with IEC 61010-1, IEC 61326-1 and this specification, and shall be suitable for the tests of screening efficiency in IEC 60895 and IEEE 1067.
- 4.2.2 The tester shall be a portable, battery-operated, microprocessor-based digital instrument. It shall consist of the following main parts: an electric-field source (transmitter) with its electrode, a field sensor (receiver) with a hand-held probe, a measuring unit with a display, a test fixture, reference samples, test cables, and a carrying case.
- 4.2.3 The tester shall measure the screening efficiency of suit fabric samples, of seams, zips, cuffs and connection points, and of complete garments (jacket, trousers, hood, gloves and socks).
- 4.2.4 The housing shall be of a rugged, impact-resistant material and shall be free from sharp edges. All external metal parts shall be corrosion resistant. Controls shall be operable by a person wearing work gloves.
- 4.2.5 The operator must be able to perform the full test sequence using only the tester itself and the suit's existing features

4.3 Measuring Function

- 4.3.1 The tester shall measure and display the screening efficiency in dB and in %. The measurement shall be made at the power frequency of 50 Hz.
- 4.3.2 The measuring range shall be at least [0 to 70] dB (0 to 99.9%). The resolution shall be 0.1 dB, and the accuracy shall be within $\pm[1]$ dB over the range. The repeatability shall be within $\pm[0.5]$ dB.
- 4.3.3 The measurement shall be selective at the test frequency, and shall reject interference from ambient 50 Hz fields, mains harmonics and radio-frequency noise, so that the reading is stable and correct in a workshop with other equipment in use.
- 4.3.4 The tester shall display a stable reading in not more than [5] seconds, and shall not require more than [10] seconds for each test point.

Head of Section: Sub-transmission, Central Office	Head of Department: Transmission, Central Office
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Date: 2026-10-19	Date: 2026-10-19

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		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 8 of 19

4.3.5 The tester shall have a programmable pass/fail threshold, with a clear PASS and FAIL indication. The default threshold shall be the minimum screening efficiency required by IEC 60895 for the suit class under test, as confirmed by KPLC from the edition in force:

4.3.6 The tester shall be able to measure the electrical resistance and continuity between the parts of the suit (hood, jacket, trousers, gloves and socks), as per IEC 60895.

4.4 Test Fixture and Accessories

4.4.1 The tester shall have a test fixture that holds a fabric sample of at least [300 mm x 300 mm] flat between the field source and the sensor without stretching or creasing it, with repeatable positioning.

4.4.2 The test fixture for garments shall be an insulating stand or mannequin on which a complete suit can be mounted, with a hand-held probe for testing seams, joints and connection points. The insulating parts shall not affect the measurement.

4.4.3 The following accessories shall be supplied with each tester:

- a) Two (2) reference samples (one of high and one of low screening efficiency) with calibration certificates;
- b) One (1) set of shielded test cables and a spare probe tip;
- c) One (1) mains charger and one (1) charging cable;
- d) One (1) USB cable and the data software;
- e) One (1) rigid carrying case;
- f) One (1) set of operating and maintenance manuals in English, including the test procedure for conductive suits.

4.5 Display, Data Storage and Interface

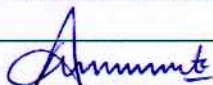
4.5.1 The tester shall be equipped with a 3.2-inch backlit digital LCD display that is clearly readable in both bright daylight and dim light conditions.

The display shall simultaneously show:

- Screening efficiency (in dB)
- Pass/Fail result
- Battery state
- Test frequency

4.5.2 The tester shall store at least [2,000] test records, each with the date and time, suit identification number, garment part tested, the screening efficiency, the pass/fail result and the operator identity. The records shall be kept without power.

4.5.3 The tester shall transfer the records to a computer through a USB port, Bluetooth and type C. The supplied software shall run on Windows, shall display and print a test report for each suit, and shall export the data in CSV or PDF format. The firmware and software shall be upgradable.

Head of Section: Sub-transmission, Central Office	Head of Department: Transmission, Central Office
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		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 9 of 19

4.6 Power Supply

- 4.6.1 The tester shall be powered by a rechargeable lithium-ion battery that gives at least 8 hours of continuous use. It shall have a low-battery indication, and shall operate while the charger is connected.
- 4.6.2 The charger shall operate on a 90V to 264V, 50 Hz supply, and shall be fitted with BS 1363, type G plug. The battery shall retain not less than 80% of its capacity after 500 charge cycles.

4.7 Safety and Electromagnetic Compatibility

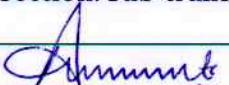
- 4.7.1 The tester shall comply with IEC 61010-1. The electric-field source shall be of low energy, with the output current limited to a safe value not more than 3.5mA and no hazardous live part shall be accessible to the operator.
- 4.7.2 The tester shall comply with the EMC immunity requirements of IEC 61326-1, including electrostatic discharge, radiated and conducted immunity and power-frequency magnetic field, and with the emission limits of CISPR 32. The readings shall stay within the accuracy limit during these tests.

4.8 Calibration

- 4.8.1 Each tester shall be supplied with a calibration certificate issued by a laboratory accredited to ISO/IEC 17025:2017. The certificate shall state the measured values and the expanded measurement uncertainty, evaluated in accordance with ISO/IEC Guide 98-3 and shall demonstrate metrological traceability to the International System of Units (SI), as required by ISO/IEC 17025:2017. The certificate shall also show the calibration date, the tester's model and serial number, and the reference equipment used.
- 4.8.2 The tester shall have a self-check function and shall allow a calibration check with the reference samples at any time. The calibration interval shall be stated by the tenderer and shall be not less than 12 months.
- 4.8.3 The tenderer shall state where the tester can be recalibrated and the cost, and shall confirm that recalibration is available to KPLC for the whole life of the equipment.

4.9 Enclosure and Weight

- 4.9.1 The measuring unit shall have a degree of protection of at least IP54, and the carrying case shall protect the tester against dust, water, shock and vibration during transport. The tester shall withstand a drop of 1 m onto a hard surface in its case without loss of function and calibration.
- 4.9.2 The measuring unit shall weigh not more than 5 kg, and the complete kit in its case not more than 20 kg.

Head of Section: Sub-transmission, Central Office	Head of Department: Transmission, Central Office
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Date: 2026-10-19	Date: 2026-10-19

	TITLE: SCREENING EFFICIENCY TESTER FOR CONDUCTIVE SUITS	Doc. No.	NO.KP1/7B.2/TSM/ST/09/015-1
		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 10 of 19

4.10 Technical Particulars

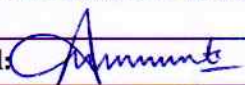
4.10.1 The screening efficiency tester shall have the technical particulars shown in Table 1 below.

Table 1: Technical particulars of Screening Efficiency Tester for Conductive Suits

Parameter	Description
Application	Conductive suits for live-line work on 66 kV, 132 kV and 220 kV lines
Measured quantity	Electric-field screening efficiency, in dB and %
Test frequency	50 Hz
Measuring range	At least 0 to 70 dB, 0 to 99.9%
Resolution	0.1 dB
Accuracy	Within ± 1 dB
Repeatability	Within ± 0.5 dB
Time to stable reading	Not more than 5 s
Pass/fail threshold	Programmable; default as required by IEC 60895 / IEEE 1067
Sample size on fixture	At least 300 mm x 300 mm
Display	Backlit digital LCD
Data storage	At least 2,000 records, USB, Bluetooth and type C. Windows software
Power supply	Rechargeable lithium-ion battery, at least 8 h; charger 90V to 260V, 50 Hz
Output current of field source	Not more than 3.5 mA
Degree of protection	IP54 minimum
Operating temperature	-5 °C to +50 °C
Storage temperature	-5 °C to +60 °C
Humidity range (relative humidity)	20% to 96%, non-condensing
Weight	Measuring unit not more than 5 kg; complete kit not more than 20 kg
Calibration	ISO/IEC 17025 certificate; interval not less than 12 months
Safety and EMC	According to IEC 61010-1 and IEC 61326-1
Type test	According to IEC 61010-1, IEC 61326-1, IEC 60529 and IEC 60068

5. TEST REQUIREMENTS

5.1 The screening efficiency tester shall be inspected and tested in accordance with IEC 61010-1, IEC 61326-1, IEC 60529, IEC 60068 and this specification. It shall be the responsibility of the manufacturer to perform or to have performed all the tests specified. Tenderers shall confirm the manufacturer's capabilities in this regard when submitting tenders. Any limitations shall be clearly specified.

Head of Section: Sub-transmission, Central Office	Head of Department: Transmission, Central Office
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Date: 2026-10-19	Date: 2026-10-19

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		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 11 of 19

5.2 Copies of previous test and calibration reports issued by the manufacturer or a third-party testing laboratory that is accredited to ISO/IEC 17025:2017, confirming the accuracy and compliance of the tester offered, shall be submitted with the offer for evaluation all in English language.

5.3 Copies of test and calibration reports for the tester offered shall be submitted, covering the following tests:

a) Routine tests (on every unit)

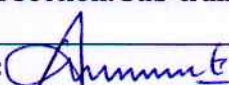
- i. Visual and dimensional inspection
- ii. Accuracy checks at not less than five (5) points over the measuring range, using reference samples
- iii. Safety checks on mains-connected parts and the charger, including the dielectric test and the output current limit
- iv. Battery, charger and display function
- v. Data storage and transfer to the computer
- vi. Marking and durability of markings

b) Type tests

- i. Accuracy and repeatability over the whole range, at the test frequency and with ambient 50 Hz interference present
- ii. Environmental tests: temperature, humidity and storage (IEC 60068)
- iii. Vibration, shock and drop tests, including the carrying case
- iv. Degree of protection (IEC 60529)
- v. Electromagnetic compatibility: immunity and emissions (IEC 61326-1, IEC 61000-4 series, CISPR 32)
- vi. Electrical safety (IEC 61010-1)
- vii. Battery life test and charge-cycle test

c) Functional tests on the instrument that shall include:

- i. Clear indication of the result and the pass/fail status
- ii. Response time to a stable reading
- iii. Test of the pass/fail threshold at, above and below the set value
- iv. Test of a fabric sample, a seam and a complete garment on the test fixture
- v. Retention of records without power
- vi. Self-check and calibration check with the reference samples

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Date: 2026-10-19	Date: 2026-10-19

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		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 12 of 19

6. MARKING AND PACKING

6.1 Marking

The following information shall be marked legibly and permanently on the tester:

- The manufacturer's name and trade mark;
- Model number;
- Serial number and month/year of manufacture;
- Supply rating of the charger and degree of protection;
- Date of last calibration and calibration due date;
- Letters "Property of Kenya Power & Lighting Plc".

6.2 Packing

- The tester and its accessories shall be packed in a rigid carrying case, with shaped foam inserts, so as to protect them from damage and entry of moisture during transportation, handling and storage.
- The carrying case shall be shock proof and impact resistant and shall be able to withstand a fall of the packed tester.

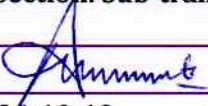
7. WARRANTY

- The screening efficiency tester shall be backed by a minimum of 12-months warranty period from the date of delivery to KPLC stores.
- Technical support and software upgrades shall be provided free of charge to KPLC for a period of not less than 36 months, and the availability of spare parts, accessories and recalibration shall be guaranteed for a period of not less than 5 years.
- The Bidder shall submit a signed clause-by-clause statement of compliance with the specification (GTP) together with copies of the manufacturer's catalogues, brochures, technical data and proven test reports, all in English, for evaluation, according to Appendix C1 of this Specification. The manufacturer's type reference/designation of the item offered shall be indicated.
- In the case of tender award, technical details for the screening efficiency tester shall be submitted to Kenya Power for approval before manufacture commences, according to Appendix C2 of this Specification.

8. TRAINING

8.1 Training at the manufacturer's premises

- 8.1.1 The successful bidder/manufacturer shall arrange to conduct a Factory Acceptance Test for the manufactured testers. The Factory Acceptance Test shall include training on the tester for [two (2)] KPLC engineers/technicians. At least one (1) of the engineers/technicians shall be live-line users.
- 8.1.2 The training shall include theory followed by practical demonstrations on the set-up and operation of the tester, the test procedure for fabric samples, seams and complete suits, the reading of results and the calibration check.

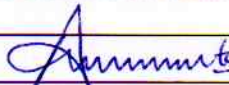
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Date: 2026-10-19	Date: 2026-10-19

	TITLE: SCREENING EFFICIENCY TESTER FOR CONDUCTIVE SUITS	Doc. No.	NO.KP1/7B.2/TSM/ST/09/015-1
		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 13 of 19

- 8.1.3 The manufacturer shall plan adequate time for the training, which shall be conducted by the manufacturer's expert.
- 8.1.4 The training shall be deemed successful once the engineers/technicians are able to inspect, test and use the tester safely.
- 8.1.5 The manufacturer shall meet all the costs of the factory training.

8.2 Local Training

- 8.2.1 Following delivery of the testers, the manufacturer shall conduct training in Nairobi, Kenya. The training shall be conducted in one session of [20] KPLC engineers/technicians and shall last at least [two (2) days].
- 8.2.2 The training shall include theory on features and how the equipment works, safe live-line working practice, the in-service testing and care of conductive suits (IEEE 1067), reading and recording results, calibration checks and battery care, followed by practical demonstrations. All steps shall be exhaustively explained and demonstrated.
- 8.2.3 The training shall be considered to have been successful once the engineers/technicians are able to completely inspect, test and use the tester.
- 8.2.4 The supplier shall meet all the costs for conducting the local training, including local accommodation and transport for their training staff. The supplier shall provide all the training materials including notes.

Head of Section: Sub-transmission, Central Office	Head of Department: Transmission, Central Office
Signed: 	Signed: 
Date: 2026-10-19	Date: 2026-10-19

	TITLE: SCREENING EFFICIENCY TESTER FOR CONDUCTIVE SUITS	Doc. No.	NO.KP1/7B.2/TSM/ST/09/015-1
		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 14 of 19

APPENDICES

A: TESTS AND INSPECTION (Normative)

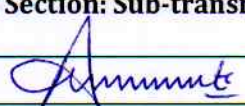
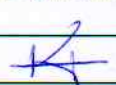
- A.1 It shall be the responsibility of the supplier to test or to have all the relevant tests performed on the screening efficiency tester.
- A.2 Copies of previous test reports issued by the manufacturer or a third-party testing laboratory that is accredited to ISO/IEC 17025:2005 or 17025:2017 shall be submitted with the tender for the purpose of technical evaluation. A copy of the accreditation certificate for the testing laboratory shall also be submitted with the tender (all in English language). Any translations of certificates and test reports into English language shall be signed and stamped by the Testing Authority.
- A.3 Test certificates and calibration certificates shall be submitted by the supplier to KPLC for approval before supply/delivery.
- A.4 On receipt of the testers, Kenya Power will inspect the items and may perform relevant tests (including a check of accuracy against reference samples) in order to verify compliance with the specification. The supplier shall replace without charge to Kenya Power any unit that upon test or use fails to meet any or all of the requirements in the specification.

B: QUALITY MANAGEMENT SYSTEM (Normative)

- B.1 The supplier shall submit a Quality Assurance Plan (QAP) that will be used to ensure that the physical properties, tests and documentation of the tester will fulfil the requirements stated in the contract documents, standards, specifications and regulations. The QAP shall be based on and include relevant parts to fulfil the requirements of ISO 9001:2015.
- B.2 The manufacturer's Declaration of Conformity to applicable standards and copies of quality management certifications, including a copy of valid and relevant ISO 9001:2015 certificate, shall be submitted with the tender for evaluation.
- B.3 The bidder shall indicate the delivery time of the equipment. A detailed list and contact addresses (including e-mail) of the manufacturer's previous customers for similar live-line equipment sold shall be submitted with the tender for evaluation.

C: TECHNICAL DOCUMENTATION (Normative)

- C.1 The bidder shall submit its tender complete with technical documents for tender evaluation. The technical documents to be submitted (all in English language) shall include:
- Where the bidder is not the Original Equipment Manufacturer (OEM), the bidder shall be a licensed dealer or an agent duly authorized by the OEM to supply the offered equipment. The bidder shall submit a valid Manufacturer's Authorization Letter (MAL) issued by the OEM
 - Fully filled clause-by-clause Guaranteed Technical Particulars (GTP) signed by the dealer, agent or manufacturer as indicated in Appendix D of this Specification;
 - Copies of the manufacturer's catalogues, brochures, drawings giving all relevant dimensions, block / schematic diagram and technical data;
 - The bidder shall submit records of previous supply of the offered items, to national grid utilities,

Head of Section: Sub-transmission, Central Office	Head of Department: Transmission, Central Office
Signed: 	Signed: 
Date: 2026-10-19	Date: 2026-10-19

	TITLE: SCREENING EFFICIENCY TESTER FOR CONDUCTIVE SUITS	Doc. No.	NO.KP1/7B.2/TSM/ST/09/015-1
		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 15 of 19

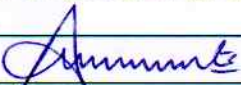
both local and foreign, within the last five years. Each record shall include the client's name and contact, contract reference, equipment description and quantity, delivery date, and a client-issued performance or completion certificate.

- e) Details of manufacturing capacity and the manufacturer's experience;
- f) Copies of required test reports of a testing laboratory accredited to ISO/IEC 17025;
- g) Copy of accreditation certificate to ISO/IEC 17025 for the testing laboratory;
- h) Manufacturer's letter of authorisation, ISO 9001 certificate, and other technical documents required in the tender;
- i) Manufacturer's warranty and guarantee, subject to 12 months from date of delivery of items to KPLC stores;
- j) Operational and service manual for the items.

C.2 The successful bidder (supplier) shall submit the following documents/details to The Kenya Power & Lighting Company for approval before manufacture:

- a) Fully filled clause-by-clause GTP stamped and signed by the manufacturer, dealer or agent as indicated in Appendix D;
- b) Drawings and block diagram of the tester to be manufactured for KPLC;
- c) Product operation manuals and brochures;
- d) Quality assurance plan (QAP) used to ensure that the design, material, workmanship, tests, service capability, maintenance and documentation will fulfil the requirements stated in the contract documents, standards, specifications and regulations. The QAP shall be based on and include relevant parts to fulfil the requirements of ISO 9001:2015;
- e) Marking details and method to be used in marking the tester;
- f) All documentation necessary for safety of the equipment;
- g) Packaging details including packaging materials

C.3 The supplier shall submit recommendations for use, care, storage, and routine inspection and in-service dielectric testing procedures, all in the English language, during delivery of the testers to KPLC stores.

Head of Section: Sub-transmission, Central Office	Head of Department: Transmission, Central Office
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Date: 2026-10-19	Date: 2026-10-19

	TITLE: SCREENING EFFICIENCY TESTER FOR CONDUCTIVE SUITS	Doc. No.	NO.KP1/7B.2/TSM/ST/09/015-1
		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 16 of 19

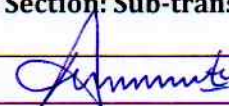
D: GUARANTEED TECHNICAL PARTICULARS (Normative)

To be filled and signed by the Manufacture, dealer or agent and submitted together with relevant copies of the Manufacturer's catalogues, brochures, drawings, technical data, sales records for previous five years, four customer reference letters, details of supplier's capacity and experience, and copies of complete type test certificates and test reports for tender evaluation, all in English language.

Tender No.

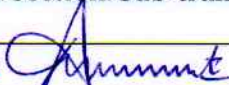
Bidder's name and address

Clause number	Requirement	KPLC Requirement	Bidder's offer
	Manufacturer's name and address	State	
	Country of manufacture	State	
	Name and model number	State	
1.0	Scope	State	
2.0	Normative references	State	
3.0	Definitions and abbreviations	State	
4.0	Requirements		
4.1	Service conditions	State	
4.2	Design and construction		
4.2.1	Standards of design and manufacture	State	
4.2.2	Main components of the tester	State	
4.2.3	Items tested: fabric, seams, connection points, complete garments	State	
4.2.4	Housing material and ruggedness	State	
4.3	Measuring function		
4.3.1	Measured quantity and test frequency	State	
4.3.2	Measuring range, resolution, accuracy and repeatability	State	
4.3.3	Rejection of ambient 50 Hz and other interference	State	
4.3.4	Time to stable reading	State	
4.3.5	Programmable pass/fail threshold and default value	State	
4.3.6	Optional resistance / continuity function	State	
4.4	Test fixture and accessories		
4.4.1	Sample fixture and sample size	State	

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Date: 2026-10-19	Date: 2026-10-19

 Kenya Power	TITLE: SCREENING EFFICIENCY TESTER FOR CONDUCTIVE SUITS	Doc. No.	NO.KP1/7B.2/TSM/ST/09/015-1
		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 17 of 19

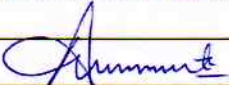
Clause number	Requirement	KPLC Requirement	Bidder's offer
4.4.2	Garment stand or mannequin and hand-held probe	State	
4.4.3	Accessories supplied	State	
4.5	Display, data storage and interface		
4.5.1	Display type and readability	State	
4.5.2	Number and content of stored records	State	
4.5.3	Data transfer, software and report format	State	
4.6	Power supply		
4.6.1	Battery type and continuous operating time	State	
4.6.2	Charger rating, plug type and battery cycle life	State	
4.7	Safety and EMC		
4.7.1	Electrical safety and output current limit	State	
4.7.2	EMC immunity and emission compliance	State	
4.8	Calibration		
4.8.1	Calibration certificate, laboratory and uncertainty	Attach	
4.8.2	Self-check, reference samples and calibration interval	State	
4.8.3	Recalibration service location and cost	State	
4.9	Enclosure and weight		
4.9.1	Degree of protection and drop withstand	State	
4.9.2	Weight of measuring unit and complete kit	State	
4.10	Table 1 technical particulars		
4.10.1	Measuring range (at least [0 to 60] dB)	State	
4.10.2	Accuracy (within $\pm[1]$ dB) and repeatability	State	
4.10.3	Power supply and battery time	State	
4.10.4	Degree of protection (IP54 minimum)	State	
4.10.5	Operating temperature (-5 °C to +50 °C)	State	
5.0	Test requirements		
5.1	Manufacturer's capabilities of inspection and testing	State	
5.2	Copies of previous test reports; accreditation certificate and scope	Attach	

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Date: 2026-10-19	Date: 2026-10-19

 Kenya Power	TITLE: SCREENING EFFICIENCY TESTER FOR CONDUCTIVE SUITS	Doc. No.	NO.KP1/7B.2/TSM/ST/09/015-1
		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 18 of 19

Clause number	Requirement	KPLC Requirement	Bidder's offer
5.3	Copies of routine, type and functional test reports	Attach	
6.0	Marking and packing		
6.1	Marking	Specify	
6.2	Packing	Specify	
7.0	Warranty: state duration	State	
7.1	Minimum 12-months factory warranty	State	
7.2	Technical support and software upgrades (36 months) and spare parts / recalibration availability (5 years)	State	
7.3	Clause-by-clause statement of compliance with supporting documents	State	
7.4	Technical details for KPLC approval before manufacture	State	
8.0	Training		
8.1	Training at manufacturer's premises ([2] engineers/technicians)	State compliance	
8.2	Local training ([20] engineers/technicians, at least [2] days)	State compliance	
A	Test and inspection		
A.1	Responsibility of carrying out tests	State	
A.2	Copies of type test reports submitted with tender	Provide	
A.3	Test and calibration certificates for approval before delivery	Provide	
A.4	Inspection at the stores and replacement of rejected items	State	
B	Quality management system		
B.1	Quality Assurance Plan	Provide	
B.2	Copy of ISO 9001:2015 certificate	Provide	
B.3	Manufacturer's experience and list of previous customers	Provide	
C	Technical documentation		
C.1	Documents submitted with tender	Provide	
C.2	Documents to be submitted for approval before manufacture	Provide	
C.3	Documents to be submitted during delivery at the store	Provide	
	Statement of deviations, if any, and supporting documents	State deviations	

NOTE:

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Date: 2026-10-19	Date: 2026-10-19

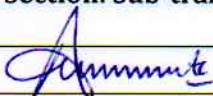
 Kenya Power	TITLE: SCREENING EFFICIENCY TESTER FOR CONDUCTIVE SUITS	Doc. No.	NO.KP1/7B.2/TSM/ST/09/015-1
		Issue No.	1
		Revision No.	0
		Date of Issue	2026-10-19
			Page 19 of 19

1) Bidders shall give full details of the items on offer as per the specification and applicable standards. The details provided shall conform to the test reports and their certificates, as well as labelled drawings complete with dimensions, catalogues and/or brochures for the purpose of tender evaluation.

2) Bidders should note that the above Guaranteed Technical Particulars schedules must be fully completed and submitted with the bid. Wherever there is conflict between the GTPs and the clauses in the specification, the clauses in the specification take precedence. Failure to complete the schedules shall lead to rejection of the bid.

3) Guaranteed values shall be specified. Words like 'agreed', 'confirmed', 'As per KPLC specifications', etc. shall not be accepted and shall be considered non-responsive.

.....
Manufacturer's Name, Signature, Stamp and Date

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Date: 2026-10-19	Date: 2026-10-19