DOCUMENT NO: KP1/6C/4/1/TSP/14/016



Kenya Power

TOOL-LESS METER SECURITY SEALS — SPECIFICATION

A Document of the Kenya Power & Lighting Co. Ltd **January 2018**



TITLE:

TOOL-LESS METER SECURITY SEALS — SPECIFICATION

Doc. No.	KP1/6C/4/1/TSP/10/113
Issue No.	1
Revision No.	3
Date of Issue	2018-01-19

TABLE OF CONTENTS
0.1 Circulation List
0.2 Amendment Record
FOREWORD4
1. SCOPE5
2. REFERENCES (NORMATIVE)5
3. DEFINITIONS AND ABREVIATIONS5
4. REQUIREMENTS5
4.1. Service conditions5
4.2. Design and construction6
4.3. Guarantee and Warranty
5. TEST REQUIREMENTS
6. MARKING AND PACKING
6.1. Marking
6.2. Packaging
APPENDICES
APPENDIX A: TESTS AND INSPECTION (NORMATIVE)
APPENDIX B: QUALITY MANAGEMENT SYSTEM (NORMATIVE)10
APPENDIX C: TECHNICAL DOCUMENTATION (NORMATIVE)
APPENDIX D: GUARANTEED TECHNICAL PARTICULARS (GTPS) — NORMATIVE 12

Issued by: Head of Section, Standards Development	Authorized by: Head of Department, Standards	
Signed:	Signed:	
Date: 2018-01-19	Date: 2018-01-19	



TITLE:

Doc. No.	KP1/6C/4/1/TSP/10/113
Issue No.	1
Revision No.	3
Date of Issue	2018-01-19

Kenya Power & Lighting Co. Ltd.

0.1 Circulation List

COPY NO.	COPY HOLDER
1	Manager, Standards
Electronic copy (pd	lf) on Kenya Power server (http://172.16.1.40/dms/browse.php?fFolderId=23)

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.

© Kenya Power & Lighting Co. Ltd.

Users are reminded that by Section 25 of the Copyright Act, 2001 (Revised 2009) Cap 130 of the Laws of Kenya copyright subsists in all KPLC Standards and except as provided under Section 26 of this Act, no KPLC Standard produced by KPLC may be reproduced, stored in retrieval system by any means without prior permission from the Managing Director & CEO, KPLC.

Issued by: Head of Section, Standards Development	Authorized by: Head of Department, Standards	
Signed:	Signed:	
Date: 2018-01-19	Date: 2018-01-19	



TOOL-LESS	METER	SECURITY	SEALS
	SPECIFI	CATION	

Doc. No.	KP1/6C/4/1/TSP/10/113	
Issue No.	1	
Revision No.	3	
Date of Issue	2018-01-19	

Kenya Power & Lighting Co. Ltd.

0.2 Amendment Record

TITLE:

Rev No.	Date (YYYY-MM-DD)	Description of Change	Prepared by (Name & Signature)	Approved by (Name & Signature)
Issue 1 Rev 0	Jan 2004	New Issue	W. Njoroge	Ezra Ndenderu
Issue 1 Rev 1	Jan 2006	Revision	W. Njoroge	Ezra Ndenderu
Issue 1 Rev 2	Feb 2006	Revision	M. Gichuki	John Ombui
Issue 1 Rev 3	2018-01-19	i. Defined the Standard and Grade for the stranded stainless-steel wire ii. Redefined Guarantee and Warranty (Clause 4.3) iii. Added Test Requirements	Rotich Benard	Dr. Eng. P. Kimemia

Issued by: Head of Section, Standards Development	Authorized by: Head of Department, Standards	
Signed:	Signed:	
Date: 2018-01-19	Date: 2018-01-19	



Kenya Power & Lighting Co. Ltd.

TITLE:

TOOL-LESS METER SECURITY SEALS — SPECIFICATION

Doc. No.	KP1/6C/4/1/TSP/10/113
Issue No.	1
Revision No.	3
Date of Issue	2018-01-19

FOREWORD

This Specification has been prepared by Standards Department in collaboration with the Meter Central Laboratory, both of the Kenya Power and Lighting Co. Ltd, here known as Kenya Power. It lays down requirements for Tool-less Meter Security Seals, herein known as Seals, for use on energy meters.

These Seals shall be used as tamper-indicative seals on utility meters for low and medium security applications. The removal of these seals requires cutting the wire shackle, which provides clear evidence of tampering. Because the seal shackle must be destroyed in order for the seal to be removed, each tamper-evident padlock seal can only be used a single time.

The Seals are not intended to stop or impede unauthorized access to the meter. Their primary purpose is to record that tampering of the meter has taken place.

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

Name	Designation	Department	
Rotich Benard	4 th Assistant Engineer	Standards	
Alfred Mwangi	3 rd Assistant Engineer	Meter Central Laboratory	
Peter Wanyonyi	Ag. Chief Engineer, Inst	Installations Management	

Issued by: Head of Section, Standards Development	Authorized by: Head of Department, Standards
Signed:	Signed:
Date: 2018-01-19	Date: 2018-01-19



Kenya Power & Lighting Co. Ltd.

TITLE: TOOL-LESS METER SECURITY SEALS — SPECIFICATION

Doc. No.	KP1/6C/4/1/TSP/10/f13
Issue No.	1
Revision No.	3
Date of Issue	2018-01-19

1. SCOPE

This Specification covers design, manufacture, testing, supply and delivery of tamper-resistant, heat resistant, polycarbonate Tool-less Meter Security Seals with stainless steel wire to be used for sealing/securing of energy meters.

2. REFERENCES (NORMATIVE)

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

BS 7480:

Specification for security Seals;

BS EN 10002-2:

Method of Test for Tensile Metallic Materials;

BS EN 10088-3:2014: Technical delivery conditions for semi-finished products, bars, rods, wire, sections and bright products of corrosion resisting steels for general purposes.

3. DEFINITIONS AND ABREVIATIONS

For this Specification, the definitions and abbreviations given in the reference standards shall apply.

4. REQUIREMENTS

4.1. Service conditions

The Seals shall be suitable for continuous use in tropical areas and harsh climatic conditions including areas exposed to:

- a) Altitudes of up to 2200m above sea level
- b) Humidity of up to 95%
- c) Average ambient temperature of +30°C with a minimum of -1°C and a maximum of +40°C, in direct sunlight,
- d) Pollution: Design pollution level to be taken as "Heavy" (Pollution level III) for inland and "Very Heavy" (Pollution level IV) for coastal applications in accordance with IEC 60815.
- e) Isokeraunic levels of up to 180 thunderstorm days per year.

Issued by: Head of Section, Standards Develo	opment Authorized by: Head of Department, Standards
Signed:	Signed:
Date: 2018-01-19	Date: 2018-01-19



Doc. No.	KP1/6C/4/1/TSP/10/113
Issue No.	1
Revision No.	3
Date of Issue	2018-01-19

4.2. Design and construction

TITLE:

- 4.2.1. The Seals shall comply fully with BS 7480, and where the specifications differ with those of BS 7480, this specification shall apply in respect only of the specific differences.
- 4.2.2. The Seals shall consist of a transparent body made of polycarbonate, a rotative mechanism (insert) made of a high impact acrylic HFI 10 or equivalent material in different standard colours, a flag for code printing and a multi-strand stainless steel wire.
- 4.2.3. The polycarbonate material shall be of clear acrylic or similar material containing UV-inhibitors reinforced with a colored insert.
- 4.2.4. The polycarbonate material used for the manufacture of the seals shall be high impact, flame retardant, best quality, virgin polycarbonate which shall be checked by boiling water and different chemical resistance test.
- 4.2.5. The wire shall be non-corrosive, non-magnetic multi-strand stainless steel, conforming to BS EN 10088-3, 1.4401 (AISI Grade 316) stainless steel grade or its equivalent.
- 4.2.6. The stainless-steel wire shall have at least 5 strands twisted and of at least 200 mm length and 0.7± 0.10 mm overall diameter with a break strength of at least 15kg/mm².



Figure 1: Typical security Seal

Issued by: Head of Section, Standards Development	Authorized by: Head of Department, Standards
Signed:	Signed:
Date: 2018-01-19	Date: 2018-01-19



Doc. No.	KP1/6C/4/1/TSP/10/113
Issue No.	1
Revision No.	3
Date of Issue	2018-01-19

- 4.2.7. The Seals shall be tool-less (of no-tool installation type) i.e. sealing mechanism designed in such way that it can be sealed without use of any tools.
- 4.2.8. The Seals shall be durable, weather proof, lead free and environmentally safe.
- 4,2.9. The Seals shall be able to reveal tampering attempts.

TITLE:

- 4.2.10. After assembly, the insert shall only rotate in the locking direction and shall not reverse. The body shall have holes on both sides to allow an easy assembly and insertion of the wire.
- 4.2.11. The flag shall have sufficient space for laser printing or heat stamping the company name/logo.
- 4.2.12. The flag shall have sufficient space for laser printing a serial number of up to 8 digits numbering with the last three digits lazed on the insert.
- 4.2.13. The stainless steel wire shall be able to rotate the insert with the aid of a breakable plastic wing nut after installation.
- 4.2.14. The sealing mechanism shall be designed for a single use only and if tampered by any means or by using sharp instrument, it shall show damage marks and shall not be capable of being restored to its original position.

4.3. Guarantee and Warranty

- 4.3.1. The supplier shall provide a commitment in writing that:
 - a. The seals manufactured for Kenya Power shall be sold only to Kenya Power.
 - b. Seals with Duplicate Serial Number to those manufactured for Kenya Power shall not be produced at the facility of the supplier.
 - c. Seals with Identical Serial Number to those supplied to Kenya Power shall not be supplied (or given or transferred or offered) to any other Person, Firm, Company or Utility under any circumstances.
- 4.3.2. The Seals shall have a warranty against any defects, which may develop due to faulty material, transportation or workmanship for a period of eighteen (18) months from the date of delivery. All defective seals shall be replaced at the supplier's cost.

5. TEST REQUIREMENTS

5.1. Tests shall be performed in accordance to BS EN 10002-1 to determine Breaking Strength and Specific Gravity test of seal wire.

Issued by: Head of Section, Standards Development	Authorized by: Head of Department, Standards
Signed:	Signed:
Date: 2018-01-19	Date: 2018-01-19



Kenya Power & Lighting Co. Ltd.

TITLE:

TOOL-LESS METER SECURITY SEALS

— SPECIFICATION

Doc. No.	KP1/6C/4/1/TSP/10/113
Issue No.	1
Revision No.	3
Date of Issue	2018-01-19

- 5.2. Tests to determine the impact of the following materials on the seals shall be done:
 - a) Effect of Hydrochloric Acid (Conc.)
 - b) Effect of Mineral Oil
 - c) Effect of Vegetable Oil
 - d) Effect of Alcohol (Ethyl)
 - e) Effect of Sodium Hydroxide, Potassium Hydroxide

6. MARKING AND PACKING

6.1. Marking

- 6.1.1. The markings shall comply with BS 7480. All markings to be written in English and with at least 3 mm figure height.
- 6.1.2. The Seals shall be marked with Kenya Power name/logo and serial numbers including barcoded information provided by the company. The Number and Code shall be intimated after placement of the order.
- 6.1.3. The Number and Code shall be laser printed or heat stamped or thermo-engraved in such a way that the same cannot be scratched by using any tools or by any chemical reaction. This shall be distinct and readable without using any lens.
- 6.1.4. The laser printing/ heat stamping/ Thermo-engraving shall be done at the facility of the supplier and shall not be out-sourced for any reason whatsoever.

6.2. Packaging

- 6.2.1. The Seals shall be packaged in such a manner as to minimize damage and entry of moisture during transportation and handling.
- 6.2.2. The Seals shall be supplied in packets of 20 nos., with seals in each packet serially arranged (with consecutive serial numbers) and fastened in such a way that while taking out the seals from the packet for use, the seals will come out serially.
- 6.2.3. 50 such packets (each packet having 20 seals) shall be packed in a carton. Each carton shall be labeled with following information:
 - a) Name and mark of manufacturer
 - b) Serial number range of the seals
 - c) Year and month of manufacture and serial number
 - d) The words "Property of The Kenya Power & Lighting Co. Ltd.".
 - e) Standard to which the seals comply

Authorized by: Head of Department, Standards
Signed:
Date: 2018-01-19



Doc. No.	KP1/6C/4/1/TSP/10/113
Issue No.	1
Revision No.	3
Date of Issue	2018-01-19

Kenya Power & Lighting Co. Ltd.

APPENDICES

APPENDIX A: TESTS AND INSPECTION (NORMATIVE)

- A.1. It shall be the responsibility of the manufacturer to perform or to have performed the tests specified in Clause 5, and other tests normally performed at works. Copies of previous test certificates and test reports by the relevant International or National Testing/Standards Authority of the country of manufacture (or ISO/IEC 17025 accredited independent laboratory) shall be submitted with the tender for the purpose of technical evaluation.
- A.2. Tests shall be carried out at the relevant International or National Testing/Standards Authority of the country of manufacture (or ISO/IEC 17025 accredited independent laboratory) on the seals and type test certificates to be submitted with the tender (by bidder) for evaluation shall be for:
 - a) Polycarbonate Body:

TITLE:

- i. Boiling water test
- ii. Chemical test
- iii. Heat test
- iv. Identification of base polymer
- v. Melting point
- vi. Ultra-violet resistance test

b) Stainless Steel wire:

- i. Seal wire test
- ii. Specific Gravity test
- iii. Breaking strength
- iv. Strands details
- A.3. Upon award of tender, Kenya Power may send engineers to inspect the manufacturer's production facility including security features that seals manufactured have.
- A.4. The Seals shall be subjected to acceptance tests at the manufacturer's works before dispatch. Acceptance tests shall be witnessed by two engineers appointed by Kenya Power.
- A.5. During delivery of the seals, Kenya Power shall inspect them and may perform or have performed any of the relevant tests to verify compliance with the specification. The supplier shall replace/rectify without charge to Kenya Power, seals which upon examination, test or use fail to meet any or all the requirements in the specification.

Issued by: Head of Section, Standards Development	Authorized by: Head of Department, Standards
Signed:	Signed:
Date: 2018-01-19	Date: 2018-01-19



Kenya Power & Lighting Co. Ltd.

KP1/6C/4/1/TSP/10/113 Doc. No. TITLE: TOOL-LESS METER SECURITY SEALS Issue No. - SPECIFICATION Revision No. 3 Date of Issue 2018-01-19

Page 10 of 16

QUALITY MANAGEMENT SYSTEM (NORMATIVE) APPENDIX B:

- The supplier shall submit a quality assurance plan (QAP) that will be used to ensure that the B.1. seals properties, tests 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 9001:2008 or later.
- The Manufacturer's Declaration of Conformity to applicable standards and copies of quality B.2. management certifications, including copy of valid and relevant ISO 9001: 2008 or 2015 certificate, shall be submitted with the tender for evaluation.
- The manufacturer shall indicate the delivery time of the seals; manufacturer's monthly and B.3. annual production capacity and experience in the production of the seals. A detailed list and contact addresses (including e-mail) of the manufacturer's previous customers for seals in the last five years as well as reference letters from at least four of the customers shall be submitted with the tender for evaluation.

Issued by: Head of Section, Standards Development	Authorized by: Head of Department, Standards
Signed:	Signed:
Date: 2018-01-19	Date: 2018-01-19



TOOL-LESS	METER	SECURITY	SEALS
	SPECIFI	CATION	

Doc. No.	KP1/6C/4/1/TSP/10/113
Issue No.	1
Revision No.	3
Date of Issue	2018-01-19

APPENDIX C: TECHNICAL DOCUMENTATION (NORMATIVE)

- C.1. The bidder shall submit its tender complete with technical documents required for tender evaluation. The technical documents to be submitted (all in English language) for tender evaluation shall include the following:
 - a) Fully-filled clause by clause Guaranteed Technical Particulars (GTPs)- Appendix D stamped and signed by the manufacturer.
 - b) Copies of the Manufacturer's drawings and technical data for the seals;
 - c) A sample of the seal

TITLE:

- d) Details of the manufacturer's experience; Sales records for the last five years and at least four customer reference letters.
- e) Copies of previous test certificates and test reports (As given in Clause A.2) by the relevant International or National Testing/Standards Authority of the country of manufacture (or ISO/IEC 17025 accredited independent laboratory). A copy of accreditation certificate for the laboratory shall also be submitted (all in English Language);
- f) Marking and Packaging details.
- C.2. The successful bidder (supplier) shall submit the following documents/details to Kenya Power for approval before manufacture:
 - a) Fully filled clause by clause Guaranteed Technical Particulars (GTPs) stamped and signed by the manufacturer (these are not the ones submitted with the tender);
 - b) Technical details and drawings with details of the seals.
 - c) A sample of the seals with the proposed numbering system.
 - d) Quality assurance plan (QAP) that will be 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.
- C.3. Routine and sample test reports for the seals to be supplied shall be submitted to Kenya Power for approval before shipment/delivery of the.
- C.4. Each carton package shall be supplied with a detailed user's installation guide printed in English language.

Issued by: Head of Section, Standards Development	Authorized by: Head of Department, Standards
Signed:	Signed:
Date: 2018-01-19	Date: 2018-01-19



TITLE:

Kenya Power

Kenya Power & Lighting Co. Ltd.

TOOL-LESS	METER SECURITY SEALS
-	SPECIFICATION

Doc. No.	KP1/6C/4/1/TSP/10/113
Issue No.	1
Revision No.	3
Date of Issue	2018-01-19

APPENDIX D: NORMATIVE

GUARANTEED TECHNICAL PARTICULARS (GTPS) —

(to be filled, stamped and signed by the <u>Supplier</u> 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 suppliers' capacity and experience; and copies of complete test certificates and test reports for tender evaluation or approval, all in English Language, as per clauses C.1 and C.2)

Tender No
Bidder's name and Address

Clause		KPLC requirement		Bidder's offer
number				
Manufacture	er's Name and a	ddress		Specify
Country of N	Aanufacture			Name
Bidder's Na	me and address	(If not the	manufacturer)	Name
Name of Iter	Name of Item offered		Name	
Make/Item C	Code of the Sea]		Name
1	Scope		State	
2.	Applicable Standards		Specify	
3.	Definitions and abbreviations		Specify	
4.	REQUIREMENTS			
4.1	Service condi	ervice conditions		Specify
4.2.1	Applicable sta	licable standards to be conformed to		State
4.2.2	Seals component and		Body Material	State
	component mat	aterials	Rotative mechanism material & colour	State
		Flag for code printing	State	
			Wire Material	State
4.2.3	Polycarbonate	ate material properties		Specify
4.2.4	Polycarbonate	Polycarbonate quality checked by boiling water and different		Specify
	chemical resis			
4.2.5	Stainless stee	tainless steel wire material and standard		Specify
4.2.6	Stainless	No of str	rands	Specify
	steel wire	Length o	f the wire	Specify
	properties	Overall	liameter	Specify
		Breaking	strength	Specify

Issued by: Head of Section, Standards Development	Authorized by: Head of Department, Standards
Signed:	Signed:
Date: 2018-01-19	Date: 2018-01-19



Kenya Power & Lighting Co. Ltd.

TITLE:

TOOL-LESS METER SECURITY SEALS — SPECIFICATION

Doc. No.	KP1/6C/4/1/TSP/10/113
Issue No.	I
Revision No.	3
Date of Issue	2018-01-19

Clause number	KPLC requirement		Bidder's offer
4,2,7	Seals are tool-le	299	Specify
4.2.8	Seals are durable, weather proof, lead free and environmentally safe		Specify
4.2.9	Seals reveals tampering attempts		Specify
4.2.10	After assembly, the insert only rotates in the locking direction and not		Specify
4.2.11	Flag has suffici	Flag has sufficient space for laser printing or heat stamping the company name/log	
4.2.12	Flag has sufficient space for laser printing or heat stamping a serial number of up to 8 digits numbering with the last three digits lazed on the insert		Specify
4.2.13	Stainless steel wire rotates the insert with the aid of a breakable plastic wing nut after installation		Specify
4.2.14	Sealing mechanism is designed for a single use only		Specify
4.3	Guarantee and		
4.3.1	Suppliers	The seals shall be sold only to Kenya Power	Specify
commitment	commitment	Seals with Duplicate Serial Number shall not be produced at the facility	Specify
		Seals with Identical Serial Number supplied to Kenya Power shall not be supplied (or given or transferred or offered) to any other entity	Specify
4.3.2	Warranty perio	d (against any defects) from the date of delivery	State
5.1	Test and standa	Test and standards for carrying out tests	
5.2	Materials impact tests on the seals		List
6	Marking and		
6.1	Marking	O .	
6.1.1		Marking standard	
6.1.2	Seals shall be marked with Kenya Power name/logo and serial State numbers including		State
6.1.3	The serial code shall be laser printed or heat stamped in such a way that the same cannot be scratched by using any tools or by any chemical reaction		State
6.1.4	Laser printing/	heat stamping/ Thermo-engraving shall have to be ility of the supplier and cannot be out-sourced	State
6.2	Packing		
6.2.1	Seals are packa	aged in such a manner as to minimize damage and entry ring transportation and handling	State

Issued by: Head of Section, Standards Development	Authorized by: Head of Department, Standards
Signed:	Signed:
Date: 2018-01-19	Date: 2018-01-19



Kenya Power & Lighting Co. Ltd.

TITLE:

TOOL-LESS METER SECURITY SEALS — SPECIFICATION

Doc. No.	KP1/6C/4/1/TSP/10/113
Issue No.	1
Revision No.	3
Date of Issue	2018-01-19

Clause	KPLC requirement	Bidder's offer
number		
6.2.2	Seals are supplied in packets of 20 nos., with seals in each packet serially arranged and fastened	State
6.2.3	Label information on each carton (each containing 50 packets)	Specify
APPENDIC	CES	
A	TESTS AND INSPECTION (NORMATIVE)	
A1	Responsibility of performing tests	State
A2	Tests shall be carried out at relevant independent /international testing laboratory and hence test reports	State
A3	Kenya Power may send engineers to inspect the manufacturer's production facility including security features that seals manufactured have	
A4	The Seals shall be subjected to acceptance tests at the manufacturer's works before dispatch, witnessed by two engineers appointed by Kenya Power	Confirm
A5	The supplier will replace/rectify without charge to Kenya Power, seals which upon examination, test or use fail to meet any or all the requirements in the specification	
В	QUALITY MANAGEMENT SYSTEM	
B1	QAP and ISO 9001:2008	State
B2	Copies of quality management certifications attached State	
B3	Delivery time, Production capacity & experience of the manufacturer State	
C	TECHNICAL DOCUMENTATION	
C1	Technical documents to be submitted with tender documents	
	 a) Fully-filled clause by clause Guaranteed Technical Particulars (GTPs)- Appendix D - stamped and signed by the manufacturer. 	state
	b) Copies of the Manufacturer's drawings and technical data for the equipment;	state
	c) A sample of the seal	
	d) Details of the manufacturer's experience; Sales records for the last five years and at least four customer reference letters.	state
	e) Copies of previous test certificates and test reports (As given in Clause A.2) by the relevant International or National Testing/Standards Authority of the country of manufacture (or ISO/IEC 17025 accredited independent laboratory) shall be submitted with the offer for evaluation. A copy of	state

Issued by: Head of Section, Standards Development		Authorized by: Head of Department, Standards	
Signed:	GAO.	Signed:	
Date: 2018-01-19		Date: 2018-01-19	



TITLE:

Kenya Power

Kenya Power & Lighting Co. Ltd.

TOOL-LESS METER SECURITY SEALS — SPECIFICATION

Doc. No.	KP1/6C/4/1/TSP/10/113
Issue No.	1
Revision No.	3
Date of Issue	2018-01-19

Clause number	KPLC requirement	Bidder's offer
	accreditation certificate for the laboratory shall also be submitted (all in English Language);	
	f) Marking & Packaging details (including packaging materials).	State
C2	Documents to be submitted Kenya Power for approval before manufacture/supply	
	a) Fully filled clause by clause Guaranteed Technical Particulars (GTPs) stamped and signed by the manufacturer (these are not the ones submitted with the tender);	State
	b) Technical details and drawings.	State
	c) A sample of the seals with the proposed numbering system	
	d) Quality assurance plan (QAP	State
C3	Routine and sample test reports will be submitted to Kenya Power for approval before shipment/delivery of the seals	State
C4	Each package is supplied with detailed user's installation guide printed in English language	Specify

^{*} 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

Issued by: Head of Section, Standards Development	Authorized by: Head of Department, Standards	
Signed:	Signed:	
Date: 2018-01-19	Date: 2018-01-19	