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# SPECIFICATION FOR PORTABLE GENERATOR.

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**MAY 1, 2023**  
**KENYA POWER AND LIGHTING CO,LTD**  
**P O BOX 30099**

	<b>SPECIFICATION FOR PORTABLE GENERATOR</b>	Doc.No.	
		Issue No.	1
		Revision No.	0
		Date of Issue	2023-05-01

## FOREWARD

This specification has been prepared by the technical services department of Kenya power and lays down minimum requirements for Portable generator. It is intended for use in the purchase of portable generators

Supplier shall submit information which demonstrates satisfactory service experience of the manufacturer with the products which fall within the scope of this specification.

### 1 Scope.

- 1.1 This specification is for single phase portable generator with operating voltage range from 220V to 250V AC.
- 1.2 The specification also covers inspection and test of portable generators and guaranteed technical Particulars to be filled, signed by the manufacturer and submitted for tender evaluation.
- 1.3 The specification stipulates the minimum requirements for the portable generator acceptable for use within KPLC system and it shall be the responsibility of the manufacturer to ensure adequacy of the design, good workmanship and good engineering practice in the manufacture of the portable generator.

### 2 REFERENCES.

The following documents were referred to during the preparation of the specification, in case of conflict, the requirements of this specification shall take precedence.

IEC 60034

### 3 TERMS AND TERMINATIONS.

dBa: Decibel.

KVA: Kilovolts Amperes

V: Voltage

KG: Kilogram

AC: Alternating current

### 4 REQUIREMENTS.

#### 4.1 Service conditions

The portable generator shall be used under the following environmental conditions.


Operating temperature range -1°C to 40°C with average temperature of 30°C.

Humidity: Upto 95%

Altitude: 2200m asl

#### 4.2 The portable generator.

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- 4.2.1 The portable generator shall be suitable for the supply of voltage to ac single phase operated devices.
- 4.2.2 The portable generator output supply voltage shall be single phase 220-240V AC, 50HZ.
- 4.2.3 The generator shall supply all single phase operated devices within its capacity.
- 4.2.4 The portable generator shall have a rated output of 5.5KVA with a maximum ac output of 7.0KVA.
- 4.2.5 The generator shall have a fuel tank capacity of between 17-20litres.
- 4.2.6 The generator noise level shall not be greater than 60dBA
- 4.2.7 The generator shall be capable of continuous operation for 6 hours.
- 4.2.8 The generator engine starting system shall be both recoil and Electric.
- 4.2.9 The generator shall have 2 ac outlets with suitable isolation system.
- 4.2.10 The generator engine fuel type shall be petrol.
- 4.2.11 The generator shall have provisions for output voltage indication.
- 4.2.12 The generator shall have provision for overcurrent/short circuit protection.
- 4.2.13 The generator weight shall not be more than 100kg
- 4.2.14 The generator shall have wheels for ease of movement.

**ANNEXES**

A1. The bidder shall indicate the delivery time of the Generators and manufacturers experience in the production of the generators.

**B TESTS AND INSPECTION.**

B1. The Portable generator shall be inspected and tested in accordance to the relevant standards. It shall be the responsibility of the supplier to perform or to have performed all the tests required to prove the correct operation of the generator.


B2. On receipt of the portable generator, KPLC shall undertake a comprehensive inspection of the generator in order to verify compliance with the specification. The equipment stands rejected if any of the requirement is not met and the supplier shall be asked to supply a generator.

**C MARKING AND PARKING.**

**C1. MARKING**

The following information shall be legibly and indelibly marked on generator by

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molding screen printing process.

- a Serial Number
- b Manufacturer
- c Type and Model
- d Power capacity
- e Output voltage

**D Documentations.**

D1. The bidder shall submit its tender complete with technical documents required by annex A (Guaranteed technical particulars) for evaluation. The technical documents to be submitted (all in English) for tender evaluation shall include the following.

- Guaranteed technical particulars signed and stamped by the manufacturer.
- Manufacturers catalogues, brochures and technical data sheets for portable generator and accessories

**5 GUARANTEED TECHNICAL PARTICULAR.**

Clause Number	KPLC requirement		Bidders offer
Manufacturers name and address	Specify		
Country of manufacture	Specify		
Bidders name and address	Specify		
Scope			
1.1-1.3	Specify		
2 Applicable standards	Specify		
3 Terms and definition	Specify		
4 Requirements			
4.1 Service condition	Minimum temperature	State	
	Maximum temperature	state	
	Average temperature	state	
	Humidity	state	
	Altitude	state	

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4.2 Portable generator requirements			
4.2.1 Supply devices phases	State		
4.2.2 Normal supply voltage range and frequency	state		
4.2.3 single phase or Three phase devices	state		
4.2.4 Rated and maximum output power	State		
4.2.5 Fuel tank capacity	state		
4.2.6 Maximum noise level	State		
4.2.7 Continuous operating time	state		
4.2.8 Engine starting system	State		
4.2.9 Number of ac outputs	State		
4.2.10 Generator engine fuel	State		
4.2.11 Output voltage Indication	state		
4.2.12 Overcurrent/Short circuit protection	State		
4.2.13 Generator weight	state		
4.2.14 Movement wheels	state		
A			
A1 Delivery time, manufacturers' experience.	State		
B Test and inspection			
B1 Inspection and testing	State		
B2 Inspection at KPLCs stores	State		
A. PARKING AND MARKING			
C1 Marking	State		
D DOCUMENTATION			
D1 List of required documents for evaluation	State		

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