

**MATERIAL SPECIFICATIONS CELL**

TECHNICAL SPECIFICATION

OF

SINGLE PHASE 240V AC, 450 VA GENERATOR SET

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### 1.0 SCOPE

This specification covers the design, engineering, manufacture, testing at manufacturer's works before dispatch, packing, supply and delivery of portable generator set.

## **2.0 APPLICABLE STANDARDS**

Generator Set shall conform to the specifications of IS: 7347 amended upto date.

## **3.0 GENERATOR TECHNICAL REQUIREMENTS**

- 3.01 The generator system should be light in weight & mounted on suitable trolley for easy transportation in light vehicles.
- 3.02 The supplier shall provide a minimum guarantee of one year from the date of supply at site of the set in good condition according to the specifications. Any defect in the material workmanship and failure during this period shall be corrected by free replacement of components at the site.
- 3.03 The generator set system is required to function in the following operating conditions
- i) Ambient Temperature  $-5^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$ .
  - ii) Humidity Minimum 25%, Maximum 90%
  - iii) Altitude Maximum 2000 M above MSL
- 3.04 The generator set shall be a single phase, 230 Volt, 50 Hz generator with rated output of 450 VA at unity power factor.
- 3.05 The generator set shall be equipped with the driver engine driven by petrol with recoil starter with Transistorized Magneto Ignition System. Engine tank capacity shall be minimum 2.5 liters.
- 3.06 The generator set shall be equipped with standard features such as Oil Alert, Fuel gauge, Pilot lamp & protection against overloading at maximum output of 550 VA.
- 3.07 The equipment shall be supplied with single phase, 6 Amp MCB at the output terminals.
- 3.08 The generator set shall be guaranteed for satisfactory working for the period of five years against any manufacturing defects or for any other faults with free replacement.
- 3.09 Weight of generator set shall be around 15 kgs only
- 3.10 After sales support: The after – sales service support / warranty services has to be provided.
- 3.11 Technical evaluation: Technical evaluation of offer of the equipment shall be carried out
- 3.12 Documentation: Sufficient no. of Operating/Service Manuals shall be provided along with supplied material.

## **4.0 PRE-DISPATCH INSPECTION**

The inspection shall be carried out at the place of manufacturer unless otherwise agreed upon by the manufacturer and purchaser at the time of purchases. For imported equipments the supplier/bidder shall offer the equipment at the authorized service centre /works of the original manufacturer in India or at the supplier's works/Testing centre. The manufacturer shall offer to the inspector representing.

## **5.0 NAME PLATE**

Equipment shall have name plate clearly visible, effectively secured against removal and indelibly and distinctly marked with all essential particulars as per relevant standards. Following details shall be marked on the Name Plate

Manufacturer's name & address:

Serial no.

Purchase Order No.

Month and Year of manufacture

Name of purchaser: MSEDCL

Guarantee: Five Years

ISI mark if applicable

## **6.0 GUARANTEE**

The instrument shall be guaranteed for the period of **Five** years from the date of Dispatch.

## **7.0 PACKING**

The instrument shall be suitably packed in order to avoid damage or disturbance during transit or handling. Each instrument may be suitably packed in the first Instance to prevent ingress of moisture and dust and then placed in a cushioned carton of a suitable material to prevent damage due to shocks during transit. The lid of the carton may be suitably sealed. A suitable number of sealed cartons may be packed in a case adequate strength with extra cushioning if considered necessary. The cases may then be properly sealed against accidental opening in transit. The packing cases may be marked to indicate the fragile nature of the contents.

The following information shall be furnished with the consignment:

- i) Name of consignee.
- ii) Details of consignment
- iii) Destination
- iv) Total Weight of consignment.
- v) Sign showing upper / lower side of the crate.
- vi) Sign showing fragility of the material.
- vii) Handling and unpacking instructions

## **8.0 TRAINING OF ENGINEERS**

The successful supplier shall train Engineers of MSEDCL free of charge at their works for familiarization of design, operation and maintenance of testing equipments

**TECHNICAL SPECIFICATION OF SINGLE PHASE 240 V, 450 VA GENERATOR SET**

**Guaranteed Technical Particulars for Single phase 230V, 450VA Generator Set.**

<b>Sr No.</b>	<b>Technical Parameters</b>	<b>Desired</b>	<b>Offered Specification</b>
1.	Manufacturer name & country of manufacturer.		
2.	Type/Model, details of equipment.		
3.	Applicable standards for the instrument.	IS-7347	
4.	Supply Voltage (240V AC $\pm$ 20%, 50Hz)	240V AC $\pm$ 20%, 50Hz	
5.	Rated Output	450VA	
6.	Maximum Output	550 VA	
7.	Engine	4 Stroke, 1 Cylinder	
8.	Specific fuel consumption	Min 2.2Lit/Hr	
9.	Minimum tank capacity	2.5 Litres	
10.	The generator set shall be equipped with standard features such as a) Oil Alert, Fuel guage, Pilot lamp b) protection against overloading  c) Starting System d) Set of required Tools.	1ph.,2pole,6A MCB Recoil Starter	