

**SPECIFICATION
FOR
GENERATOR SETS, PORTABLE**

(This specification is released for procurement purposes until revised or rescinded.)

SCOPE

This specification covers portable electric generator sets to supply electrical power for hand tools.

I. CLASSIFICATION

This specification covers three types of portable electric generator sets:

Type 1 - Intermittent use.

Type 2 - Continuous duty.

Type 3 - Continuous, heavy duty use in construction work.

II. APPLICABLE STANDARDS

The following documents of issue in effect on the date of the Invitation for Bids shall form a part of this specification to the extent described in REQUIREMENTS:

MG-1 - Motors and Generators
National Electrical Manufacturer's Assn. (NEMA)
155 East 44th Street
New York, NY 10017

SAE-J607 - Small Spark Ignition Engine Test Code
Society of Automotive Engineers, Inc. (SAE)
400 Commonwealth Drive
Warrendale, PA 15096

III. REQUIREMENTS

A. ALTERNATOR

The alternator shall be self-excited, and direct connected to the engine. Insulation shall meet NEMA MG-1-1.65. Frequency regulation to be within $\pm 5\%$ no load to full load. Temperature rise to be within limits of NEMA MG-1-22.40. Other alternator requirements to be as shown in Table I.

TABLE I

<u>MIN. REQUIREMENTS</u>	<u>TYPE 1</u>	<u>TYPE 2</u>	<u>TYPE 3</u>
Volts A.C.	120	120/240	120/240
Phase/Hertz	1/60	1/60	1/60
No. of Wires	2	3	3
No. of Poles	2 or 4	4	4
KW	2.5	3.5	4.0
KVA @ PF	2.5 @ 1	3.5 @ 1	4.0 @ 1
Amps	15	30/15	30/15

B. ENGINE

The engine shall be gasoline, air-cooled, 4-cycle, with a brake horsepower rating (SAE J607) adequate to provide the KW rating required. Other minimum requirements for the engine to be as shown in Table II.

TABLE I

<u>MIN. REQUIREMENTS</u>	<u>TYPE 1</u>	<u>TYPE 2</u>	<u>TYPE 3</u>
Block	Cast Al./Cast Iron	Cast Iron	Cast Iron
Lubrication	Splash	Mfg. Std.	Lube Oil Pump
Air Cleaner	Mfg. Std.	Dry Type	Dry Type
Starter	Manual	Manual	12-V Electric
Charging Circuit	N/R	N/R	Yes
Oil Pressure Gauge	N/R	N/R	Yes
Lube Oil Filter	N/R	Yes	Yes
Exh. Valve Rotators	N/R	Yes	Yes
Intake Valves	Mfg. Std.	Alloy or Austenetic Steel	Same
Exhaust Valves	Mfg. Std.	Alloy or Austenetic Steel w/replaceable seats	Same
Fuel Filter	N/R	Yes	Yes
Choke	Yes	Yes	Yes
Muffler	Yes	Yes	Yes
Dipstick	N/R	Yes	Yes
Low Oil Pressure Shut Down	N/R	N/R	Yes

*N/R = Not Required

C. PANEL BOARD

Minimum accessories on panel board:

Type 1: Receptacles: 2-duplex, 120-v, 15-amp, 2 pole, 3-wire, grounding type.

Types 2 and 3: Receptacles: 2-duplex, 120-v, 15-amp, 2 pole, 3-wire, grounding type.
1-240-v, 15 amp, 2 pole, 3-wire, grounding type.

D. OTHER REQUIREMENTS

The complete generator set shall be provided with:

1. Vibration isolators

2. Carrying frame w/handles

IV. WARRANTY

The contractor warrants to the owner that all equipment furnished under this specification will be new, of good material and workmanship, and agrees to replace promptly any part or parts which by reason of defective material or workmanship shall fail under normal use, free of negligence or accident, for a minimum period of 12 months from date of acceptance. Such replacement shall be free of any charge to the owner.

V. SERVICE, PARTS, AND MANUALS

The contractor shall furnish at least two copies each of complete operator's instruction manual, shop manual, and a repair parts catalog for each electric generator set.

The contractor must maintain a spare parts inventory of known high mortality parts and components. Availability of such parts and components must be assured for a minimum of three years after expiration of initial warranty.

VI. ACCEPTANCE EVALUATION AND QUALITY ASSURANCE

Upon receipt of each electric generator set at the receiving point, the purchaser or his authorized representative shall arrange for an acceptance inspection for compliance with this specification.

If so stated in the Invitation for Bids, the contractor will be required to furnish a pilot model for inspection, tests and possible modification and/or adjustments of attachments in accordance with this specification.

VII. DELIVERY AND PAYMENT

Delivery and payment shall be in accordance with the terms and conditions of the Invitation for Bids. The contractor shall be responsible for any packing, packaging, or protection required to insure safe delivery in an undamaged condition.

VIII. ORDERING DATA

Purchasers should exercise any desired option offered herein and should specify the following in the Requisition and Invitation For Bids:

1. Title, number, and date of this specification
2. Type electric generator set desired (See Section I. CLASSIFICATION)
3. If a pilot model is required (See Section VI).