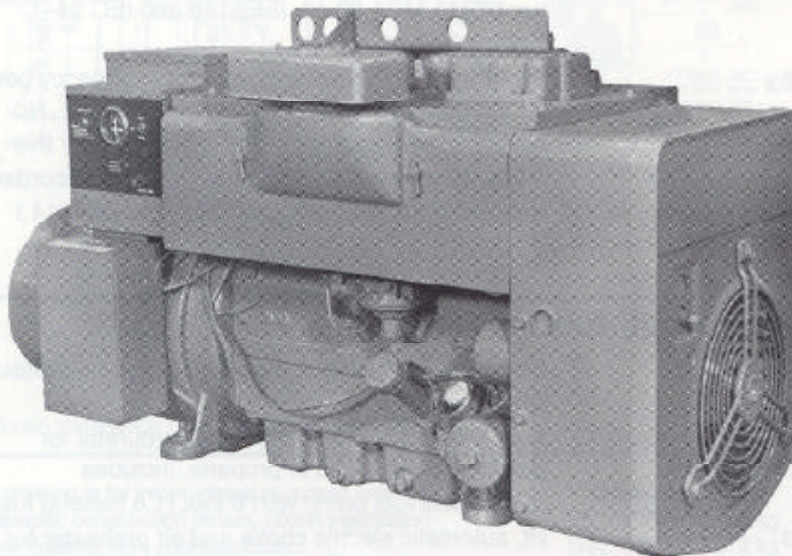




15 JCB 60 Hz 12.5 JCB 50 Hz Spark-Ignited Generator Set

STANDBY		
	1-Phase	3-Phase
60 Hz	15.0 kW 15.0 kVA	15.0 kW 19.0 kVA
50 Hz	12.5 kW 12.5 kVA	12.5 kW 16.0 kVA



Generator Set Features

- Single-source design, manufacturing and testing of all set components and accessories by Onan Corporation.
- Accepts 100% of nameplate kW rating in one step, in compliance with NFPA 110, Paragraph 5-13.2.6.
- Engine torque-matched excitation system provides quick recovery from transient speed dips.
- Designed with a complete line of factory options and accessories for standby and mobile power.

Standard Equipment

ENGINE

Onan, multi-fuel capability – gasoline, propane, natural gas (12.5kW), and combinations available.

ALTERNATOR

Brushless Onan AC alternator provides broad range reconnectable output.

CONTROL PANEL

Vibration isolated control with local or remote start/stop.

VOLTAGE REGULATOR

Electronic voltage regulator provides precise regulation and under frequency compensation.

COOLING SYSTEM

Pressure air-cooled.

MOUNTING

Four-point vibration isolated mounting system with mounting rails. Removable lifting bracket.

Generator Set Testing

The Prototype Test Support (PTS) program is our commitment to verifying the integrity of our designs and products.



Before the generator sets are put into production, prototype models are subjected to demanding tests with typical/atypical loads and transients anticipated in service.

Production models earn the PTS seal only after meeting the performance criteria established by the program.

Single-Source Warranty

All generator set components and systems are covered by a limited one-year warranty. Optional two-year and five-year extended programs are available.



Standard Models are CSA certified.

Generator Set Performance

Voltage Regulation

Under load from no load to 100% load, will be within $\pm 2\%$.

Random Voltage Variation

For constant loads from no load to 100% load, will not exceed $\pm 1\%$ of its mean value.

Frequency Regulation

Under varying loads from no load to 100% load; 5% maximum.

Random Frequency Variation

Will not exceed $\pm 0.5\%$ of its mean value for constant loads from no load to full load.

Electromagnetic Interference Attenuation

Meets requirements of most industrial and commercial applications.

AC Waveform Total Harmonic Distortion

Less than 5% total no load to full linear load, and less than 3% for any single harmonic.

Telephone Influence Factor (TIF)

Less than 40 per NEMA MG1-22.43.

Telephone Harmonic Factor (THF) Less than 3.

Alternator Temperature Rise

At rated load is less than 105° C at standby rating, per NEMA MG1.22.40, IEEE115 and IEC 34-1.

Rating Definition:

Standby: Applicable for supplying emergency power for the duration of normal power interruption. No sustained overload capability is available for this rating. (Equivalent to Fuel Stop Power in accordance with ISO3046, AS2789, DIN6271, and BS5514.)

Engine: Onan 4-cylinder, in-line, multi-fuel

Model: Onan JC

Design: 4-cycle, natural aspiration

Bore: 3.25" (83 mm) **Stroke:** 3.625" (92mm)

Piston Displacement: 120 cubic inches (2.0 liters)

Compression Ratio: 6.5:1

Starting: 12-volt, 3-wire, negative ground

Cranking Current: 225 amps at ambient temperature of 32° F (0° C)

Battery Charging Alternator: Adjustable, 2-5 amp

Cylinder Block: Cast iron

Valves: Overhead

Governor: Adjustable, mechanical, flyball, pressure lubricated

Fuel System: Combination fuel carburetor for gasoline, natural gas or propane. Includes mechanical fuel pump with 6 foot (1.8 meters) fuel lift, automatic electric choke and air preheater for gasoline operation.

Air Cleaner: Oil-wetted element

Lube Oil Capacity: 6.5 US quarts (6 liters)

Lube Oil Filter: Single spin-on, full flow

Cooling System: Pressure air-cooled

Alternator: Onan

Design:

Revolving field, single bearing, 4-pole, brushless, drip-proof construction. Standard 105° C temperature rise at standby power rating. Class F insulation system per NEMA MG1-1.65 and BS2757. The main alternator and exciter insulation systems are suitable for typical standby power applications.

Stator:

Skewed stator and 2/3 pitch windings minimize field heating and voltage harmonics.

Rotor:

Dynamically balanced assembly. Direct coupled to engine by a flexible drive disc. Complete amortisseur (damper) windings help minimize voltage deviations and heating effects under unbalanced loads. The rotor is supported by a pre-lubricated, maintenance-free ball bearing.

Torque-Matched Voltage Regulation:

The voltage regulator provides torque-matched under frequency compensation to optimize motor starting performance and assist the engine during transient load conditions. The brushless exciter armature powers the main alternator field winding through shaft-mounted, three-phase, full wave silicon diode rectifiers.

Shunt Excitation:

The excitation system derives its power from the main output of the generator, eliminating the need for a separate excitation power source. This excitation system, combined with the Onan low reactance generator, comprise a system that provides sufficient short circuit current for selective clearing of instantaneous overcurrent devices.

Phase Rotation: A (U), C (W), B (V).

Alternator Cooling: Direct drive centrifugal blower.

Control System

- Monitors engine performance and AC power output.
- Controls generator set start and shutdown.
- Remote start terminals.
- Vibration isolators protect control from generator set vibration.

Standard Control Features

- Fused DC controls
- Start-stop switch, 12-volt, 3-wire
- Exciter circuit breaker, manual reset
- Oil pressure gauge
- Battery charge rate ammeter
- Low oil pressure shutdown
- High air temperature shutdown
- Running time meter

Generator Set Options

Engine

- 120-volt, 75 watt oil base heater kit
- Heavy duty air cleaner

Cooling Systems

- Vacu-flow cooling (12 kW)

Fuel Systems

- Natural gas (high compression option - full output)
- Vacuum safety switch
- Fuel shutoff solenoid - liquid
- Fuel shutoff solenoid - gas
- Primary gas pressure regulator
- LP Vapor/Gasoline, manual
- Heater carburetor

Alternator

- Anti-condensation heater
- Full single-phase output (3-phase alternator)
- Severe environment insulation
- Single-phase, 4-wire
- Switching regulator

Control Panel

- AC meter package
 - AC voltmeter
 - 3-phase voltage selector switch
 - Ammeter - one per phase
 - Frequency meter
 - Running time meter
 - Main line circuit breakers
- Rheostat - AC voltage adjustment
- Overspeed shutdown
- 3-light control
 - Individual shutdown for:
 - Low oil pressure
 - High engine temperature
 - Overspeed
 - Remote annunciator capability for:
 - Low oil pressure
 - High engine temperature
 - Overspeed
 - Common alarm-shutdown
 - Low engine temperature
 - AC generating

Exhaust System

- Critical-grade exhaust silencer
- Rain cap
- Pipe package - silencer

Generator Set

- Battery
- Skid and battery rack
- Weather-protective enclosure with mounted silencer capability
- Air discharge duct adaptor
- Air discharge duct adaptor with thermostatically-controlled air shutters
- Fuel supply tank (requires enclosure)
- Warranty - 2-year standby
- Warranty - 2-year basic
- Warranty - 5-year comprehensive
- Flexible duct kit - vacu-flow cooled
- Flexible duct kit - pressure cooled
- Test records



Onan Corporation
1400 73rd Avenue N. E.
Minneapolis, MN 55432
612-574-5000
Telex: 275477
Fax: 612-574-8087

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See your distributor for more information.

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