

CATERPILLAR 250 kW Diesel Generator Set System

One (1) New CATERPILLAR Model C9 Diesel Engine Driven Generator Set, rated 250kW standby, 313kVA at 0.8 PF, 208/120 VAC, 3 phase, 4 wire, 60 Hertz at 1800 RPM, equipped as follows for outdoor application:

Listing and Emissions

- ◆ UL2200 Listed
- ◆ This engine is US EPA Stationary Emergency Certified.

Cooling System

- ◆ Radiator for 122 degree F open air ambient, unit mounted.
- ◆ Jacket water heater, one 3000 watt heater with thermostatic controls, 208 - 240 VAC single phase input.

Starting System

- ◆ Electric Starting Motor, 24VDC.
- ◆ Battery set, CAT High Output 24 volt DC lead acid type, with rack and cables.
- ◆ Automatic Dual Rate Battery Charger, 10 amps, Installed in genset enclosure, 120 VAC input required. Includes DC voltmeter, DC ammeter, AC fuse, DC fuse, automatic float/equalize control, and low voltage alarm.

Instrumentation & Controls

- ◆ Electronic governor, with solid state speed control board, +/- 0.25% regulation.
- ◆ CAT EMCP 4.2 Genset Controller
 - **Instrumentation:** LCD Display with adjustable contrast and backlight with auto power off. AC metering: Volts 3-phase (L-L & L-N); Amps (per phase & average); Frequency; kW (total & per phase); kVA (total & per phase); kVAr (total & per phase); Power Factor (overall & per phase); kW hours; kVAr hours DC metering: Battery Volts; Engine Hours run; Engine Jacket Water Temperature (in °C or °F); Lube Oil Pressure (in psi, kPa or bar); Engine Speed (rpm); Crank attempt counter; Start counter
 - **Protection:** Fail to start shutdown, Low oil pressure shutdown, High engine temperature, Approaching high coolant temperature alarm, Approaching low oil pressure alarm, Not in auto mode alarm, Underspeed / Overspeed, Loss of Engine Speed Detection, Low / High battery voltage, Battery charger failure (if fitted), Under volts, Over volts, Under frequency, Over frequency, Overcurrent, 4 spare fault channels 20 Event fault log (name of event, engine hours at first occurrence of event, time stamp at first, occurrence, engine hours at latest occurrence of event, time stamp at latest occurrence, number, of occurrences of event)
 - **Controls:** 2 LED status indicators (1 red shutdown, 1 amber warning), Run key and LED indicator, Auto key and LED indicator, Stop key and LED indicator, Lamp test key, Alarm acknowledge key, Menu navigation keys, Engine and AC metering shortcut keys, All control module keys have tactile feedback, Lock down emergency stop push button
 - **Other features** Real time clock, Service interval counter
- ◆ Remote Annunciator Panel, 16 position.
- ◆ Remote E-Stop Station

Generator (Alternator)

- ◆ CATERPILLAR AC power single bearing generator standby rated at 130 degree C rise, 3 phase, 4 wire, direct connected with:
 - PM Excitation System.
 - 3 phase voltage regulator +/- .25% regulation from 0% load to 100% load.
 - Main circuit breaker, 1200AF / 1200AT.

Genset Enclosure – Weather Protective – SOUND ATTENUATED

- 14 gauge steel construction with two (2) single access doors per side
- Painted standard alkyd enamel finish, color is CATERPILLAR white.