

Technical Tender Book for Supplying Caterpillar Generating set, Qty:1

• The Engine Model 3516 DITA

ENGINE POWER 1200 KW AT LEAST AT fixed speed 1000 RPM:

caterpillar 16 cylinders, turbocharged, after cooled, diesel oil field, engine 4 cycle, 170 mm bore × 191 mm stroke (6.7 in × 7.5 in stroke), counterclockwise rotation (as viewed from flywheel end)

AIR INLET SYSTEM:

after cooler core, corrosion resistant, air cleaner, regular duty (dry, panel type, with soot FILTER AND SERVICE INDICATOR).

CONTROL SYSTEM:

Electrical governor

COOLING SYSTEM:

Jacket water pump — gear-driven centrifugal.

Thermostat and housing (dual outlet).

radiator and fan suitable with all accessories installed on the engine.

EXHAUST SYSTEM:

Exhaust system, Exhaust flexible fitting, , 208 mm (8")

Exhaust flange and expander, 305 mm (12").

Exhaust manifold, dry.

Suitable muffler mounted on engine.

FLY WHEEL AND FLYWHEEL HOUSING:

Flywheel.

flywheel housing

sae standard rotation.

FUEL SYSTEM:

primary fuel filter with Water separator

Fuel filter

Fuel transfer pump

Flexible fuel line.

Fuel priming pump, LH

Fuel cooler

INSTRUMENTATION:

Instrument panel, LH, 8 holes, 7 gauges

Oil pressure

Fuel pressure

Oil filter differential pressure

Water temperature

Tachometer (rpm)

Service meter

Exhaust temperature (dual)

LUBE SYSTEM:

Crankcase breather

Oil cooler

Oil filter- shallow oil pan

Oil pan drain valve, 2" NPT female connection

Gear oil pump gear driven

Lubrication oil, sae 15w40, caterpillar deo (CG4)333L

MOUNTING SYSTEM:

Rails, mounting, floor type, 254 mm, (10")

PROTECTION SYSTEM:

Hydra- mechanical shut off (low oil pressure, high water temperature, and over speed) AIR INLET SHUT OFF , monitoring gauge and emergency remote shut off.

Alarm switch, low oil pressure, high water temperature .

supplied alarm panel manual shut off control, LH.

STARTING SYSTEM:

Air prelude valve

Prelub oil pump with silencer

Air starting motor, RH, 620 to 1034 kpa (90 to 150 psi), LH control

Air silencer

GENERAL:

Paint, caterpillar yellow

Vibration damper and guard

Lifting eyes.

• **The Generator:**

Caterpillar generator model: SR4 B

Arrangement number: 199-6824

Frame size: 868 1000 rev\min

Design rated: 1607 KVA

Rating type: prime.

Number of bearing: 2

Voltage L-L ~: 600v.

Frequency: 50 HZ

Current:1924 A.

Excitation: se (68 volt, 5.5 Amps).

PF (cos ϕ): 0.7.

Poles: 3 (6 wire).

Connection type: series star (WYe).

Insulation type: class H.

Ingress protection: IP 23.

Maximum temperature rise: 80⁰c.

Notes: complies with:

1. BS 5000 part 3.
2. NEMA MG 1-22.
3. IEC 34-1.
4. ISO 8528-3.

NOTES:

- The engine and generator should be new and not renewed.
- The bidder should define the country of origin
- The bidder should supply certificate of origin and customs declaration during delivery
- The bidder should supply original technical sheet containing the specification of offered engine and generator with technical offered.
- The bidder should supply catalogues maintenance, operation and spare parts , assembly and disassembly during delivery (engine + generator).
- Manufacture : caterpillar

The engine and generator should be constructed on one base and should be alignment to each other .

generator set mounted in suitable container with doors and enough space for maintenance.

Warranty period is one year from date of delivery.

Approved: GENERAL DIRECTOR OF SYRIAN PETROLEUM COMPANY

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