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Caterpillar 3512C Genset Package

Rated at 1476 bhp w/o Fan at 1200 rpm
Petroleum Land Electric engine
Prime Power Application

Standard Engine Consist:

AIR INLET SYSTEM

Aftercooler core, corrosion resistant
Air cleaner, regular duty, with soot filter.
Service indicators.

CONTROL SYSTEM

Caterpillar ADEM A3 ECM, LH.
Requires 24V DC 10-amp continuous, 20-amp intermittent, clean electrical power.

COOLING SYSTEM

In order to ensure compliance in use, optional or customer-supplied radiators must be capable of rejecting enough heat to allow proper operation at worst case site conditions, and also must supply 122 deg F (50 deg C) SCAC cooling water to the aftercooler inlet, with an SCAC flow rate of at least 100 GPM (379 l/m) with an ambient temperature of 86 deg F (30 deg C) and at-site conditions (including altitude considerations). Maximum allowable SCAC flow rate is 115 GPM (435 l/m).

RADIATOR COOLED LAND BASED

Outlet controlled thermostat and housing.
Jacket water pump, gear driven.
Dual outlet.
Aftercooler fresh water cooling pump (SCAC), gear driven centrifugal
SCAC pump circuit contains a thermostat to keep the aftercooler coolant from falling below 30 deg C (85 F).

EXHAUST SYSTEM

Exhaust fittings, flexible, 305 mm (12 in).
Adapter, 305 mm (12 in) to 356 mm (14 in).
Exhaust flange, weldable, 356 mm (14 in).
Exhaust manifolds, dry.



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Dual turbochargers with w/c bearings.

FLYWHEELS & FLYWHEEL HOUSINGS

Flywheel, SAE No. 00

Flywheel housing, SAE No. 00

SAE standard rotation

FUEL SYSTEM

Fuel filter.

Fuel transfer pump

Flexible fuel lines

Fuel priming pump, LH

Electronically-controlled unit injectors.

INSTRUMENTATION

Electronic instrument panel, LH.

Analog gauges with digital display data for:

Engine oil pressure gauge.

Engine water temperature gauge.

Fuel pressure gauge.

System DC voltage gauge.

Air inlet restriction gauge.

Exhaust temperature (prior to turbochargers) gauge.

Fuel filter differential pressure gauge.

Oil filter differential pressure gauge.

Service meter (digital display only).

Tachometer (digital display only).

Instantaneous fuel consumption (digital display only).

Total fuel consumed (digital display only).

Engine start-stop (off, auto start, manual start, cooldown timer).

LUBE SYSTEM

Crankcase breather

Oil cooler

Oil filter.

Shallow oil pan

Oil pan drain valve, 2" NPT female connection

Lubricating oil, SAE 10W30, Caterpillar DEO (CG4) 643 L.

MOUNTING SYSTEM

Rails, mounting, floor type, 254 mm (10 in).



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POWER TAKE-OFFS

Accessory drive.
Lower LH front (available for PTO usage).
Front housing, two-sided

PROTECTION SYSTEM

ADEM A3 ECM monitoring system provides engine de-rating, or shutdown strategies to protect against adverse operating conditions. Selected parameters are customer-programmable. Status available on engine mounted instrument panel and can be broadcast through the optional customer communications module or programmable relay control module(s). Initially set as follows:

Safety shutoff protection, electrical:

Oil pressure, water temperature, overspeed, crankcase pressure, aftercooler temperature. Includes air inlet shutoff, activated on overspeed or emergency stop.

Alarms, electrical:

ECM voltage, oil pressure, water temperature (low and high), overspeed, crankcase pressure, aftercooler temperature, low water level (sensor is optional attachment), air inlet restriction, exhaust stack temperature, filter differential pressure (oil and fuel).

Derate, electrical:

High water temperature, crankcase pressure, aftercooler temperature, air inlet restriction, altitude, exhaust temperature.

Emergency stop push button, located on instrument panel.

Alarm switches (oil pressure and water temperature), for connection to customer-supplied alarm panel. Unwired.

STARTING SYSTEM

Air starter from TDI, see below additional options included.

GENERAL

Paint, Caterpillar Yellow
Vibration damper and guard
Lifting eyes

ADDITIONAL CATERPILLAR Options included in quote

Water pump inlet connection
Single water outlet
Coolant level sensor





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Primary fuel filter
Fumes disposal
Jacket water heater, dual 12kW
Flexible coupling
Coupling hub
Charging alternator, 24v 60 amp
Engine barring group

ADDITIONAL options, included in quote

Supply/Install Caterpillar Dynamic gas blending kit,
Supply/install oil field skid
GHT remote radiator electric drive as per separate specs and drawing, tube and
grommet design
Custom "I beam" oilfield skid
Kato generator 1225 kw, 1750 kva, 600 volt motor
600 volt, 0.7 pf
60 hz 1200 rpm
2 bearing design
Caterpillar ELC coolant, 2-205 liters shipped loose
Assemble complete genset package
SOS oil sampling valve
Remote shutoff
Load test complete genset
Supply one Cat voltage regulator and harness (shipped loose)
Check literature and ship loose parts
Ship to Customer yard in *****

