

Option 1

5.2 MW Newly Remanufactured 2022 Caterpillar 3512B Diesel Generator



Harnessing Energy for Life

Option 1



Harnessing Energy for Life

Description & Additional Notes

EXCLUSIVELY FROM USP&E!

USP&E is selling 5.2 MW New Remanufactured 2022 Caterpillar 3512B Diesel Generator

Units available: 4 x 1.3 MW

Caterpillar Factory Model 3512B:

- 0 hour, CAT Factory Rebuilt
- Package Diesel Generator Set
- LO-BSFC (Best Fuel Economy)
- Not Emissions Compliant
- CAT Premium EMCP 4.2 Generator Control Panel
- Auto Start / Stop
- Engine Safety Shutdowns
- CAT SR4B Generator with Digital Voltage Regulator
- Electronic Governor
- Standard Duty Air Cleaners
- 24V Starter
- 45 Amp Alternator

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Description & Additional Notes

- Battery Set
- 44CTD Radiator
- CAT Factory 12 Month / Unlimited Hour Remanufactured Warranty.

PRODUCT SPECIFICATIONS FOR 3512B (50 HZ)

Maximum Rating	1875 kVA
Minimum Rating	1320 kVA
Emissions/Fuel Strategy	Low Fuel, Low Emissions
Voltage	380 to 415 Volts
Frequency	50 Hz
Speed	1500 rpm
Duty Cycle	Standby, Mission Critical, Prime

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Description & Additional Notes

Engine Model	3512B TA, V-12, 4-Stroke Water-Cooled Diesel
Bore	170 mm
Stroke	190 mm
Stroke - HD	215 mm
Displacement	51.8 l
Displacement - HD	58.56 l
Compression Ratio	14.0:1 Std 15.5:1 HD
Aspiration	TA
Fuel System	Electronic Unit Injection

Governor Type	Adem™3
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Description & Additional Notes

Length - Minimum	5249 mm
Length - Maximum	5469 mm
Width - Minimum	1975 mm
Width - Maximum	2286 mm
Height - Maximum	2367 mm
Dry Weight - Genset (minimum)	11350 kg
Dry Weight - Genset (maximum)	12180 kg

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Description & Additional Notes

3512B (50 HZ) STANDARD EQUIPMENT

AIR INLET SYSTEM

Angle element canister type air cleaner with service indicator

AIR INLET

Air Cleaner

COOLING

Package mounted radiator (except C175)

CONTROL PANEL

Emergency stop button

Programmable protective relaying functions:

Over / under voltage (27 / 59)

kVAr (per phase, average & percent)

kVA (per phase, average & percent)

Engine cool-down timer

Generator mounted - rear facing

Overcurrent (50/51)

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Description & Additional Notes

Warning / shutdown with common LED indication of shutdowns for:

Low coolant level

DC volts

Generator phase sequence

Overspeed

Frequency (Hz)

Volts (L-L & L-N)

Reverse reactive power (kVAr) (32RV)

Text alarm / event descriptions

2 Programmable digital outputs

RPM

2 Programmable relay outputs (Form C)

Speed adjust

Alarm acknowledge

kVAr-hr (total)

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Description & Additional Notes

Digital indication for:

Power Factor (per phase & average)

Environmental sealed front face

Controls:

True RMS AC metering, 3 phase, +/-2% accuracy

Low oil pressure

kW (per phase, average & percent)

Engine cycle crank

Accessory module data link

Coolant temperature

EMCP 4.2

24 Volt DC operation

Over / under frequency (81 o/u)

Amps (per phase & average)

4 Programmable relay outputs (Form A)

Reverse power (kW) (32)

Operating hours

Communications

Oil pressure (psi, kPa or bar)

Serial annunciator module data link

kW-hr (total)

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Description & Additional Notes

6 Programmable digital inputs

High coolant temperature

Failure to start (overcrank)

Low coolant temperature

Lamp test

Emergency stop

Auto / start / stop control

Customer data link (Modbus RTU)

EXHAUST

Exhaust flange outlet

FUEL

Secondary fuel filter

Primary fuel filter with integral water separator

Fuel priming pump

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Description & Additional Notes

FUEL

Secondary fuel filter

Primary fuel filter with integral water separator

Fuel priming pump

CONTROL SYSTEM

Engine cool-down timer.

DC volts

True RMS AC metering, 3-phase, +/-2% accuracy

High coolant temperature

Coolant temperature

Auto/start/stop control

Failure to start (overcrank)

Communications

Oil pressure

Emergency stop

EMCP4.2B

Overspeed

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Description & Additional Notes

frequency (Hz)
Volts (L-L & L-N)
Engine cycle crank
Warnings / Shutdown indicators
Speed adjust
Lamp test
24-volt DC operation
RPM
4 programmable digital inputs
Low coolant level
Operating hours
Alarm acknowledge
Emergency stop pushbutton
Low oil pressure
Amps (per phase & average)
4 programmable digital outputs

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Description & Additional Notes

Digital indication for:

GENERATOR

IP23 Protection

Matched to the performance and output characteristics of (

POWER TERMINATION

Bus Bar

GENERATOR SYSTEM

Class H temperature rise at 40C ambient

3 phase brushless, salient pole

6 lead

Winding temperature detectors

NEMA Class H insulation

Random wound

Internal Excitation

3-phase voltage sensing

Bus bar connections

min/max exciter

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Description & Additional Notes

Caterpillar's Digital Voltage Regulator (CDVR)

RFI suppression

LITERATURE

English

COOLING SYSTEM

Caterpillar extended life coolant (Not included with packages without radiator installed SF44CTS, shipped loose radiators or heat exchangers)

JWAC

Coolant level sensors. (Not included with packages without radiator)

Coolant drain line with valve

Radiator fan and fan drive

Fan and belt guards

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Description & Additional Notes

EXHAUST SYSTEM

Dry exhaust manifold
Flanged faced outlet(s)

FUEL SYSTEM

Fuel priming pump
Secondary fuel filters
Fuel cooler; not included with packages without radiator
Flexible fuel lines - shipped loose

GENERATORS AND ATTACHMENTS

Note: 1800 frames are form wound, permanent magnet, with winding temp detector
3 Phase voltage sensing
RFI suppression
Class H temperature rise at 40C ambient (125C prime / 150C standby)
Min / max exciter limiter
Exciter diode monitor
Busbar connections, top center mounted, top cable entry
3 Phase brushless, salient pole



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Description & Additional Notes

3 Phase brushless, salient pole

50 Hz models: IEC standard hole pattern

Caterpillar's Digital Voltage Regulator (CDVR) includes:

Random wound

Generator set packages include: Regulator (CDVR)

Reactive droop capability

6 Leads

KVAR / PF modes

NEMA Class H insulation

Winding temperature detectors

Internal Excitation

LV:

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Description & Additional Notes

LUBE SYSTEM

Lubricating oil
Gear type lube oil pump
Integral lube oil cooler
Oil filter, filler and dipstick
Fumes disposal
Oil drain lines and valve

MOUNTING SYSTEM

Rails - engine / generator / radiator mounting
Rubber anti-vibration mounts (shipped loose)

STARTING / CHARGING SYSTEM

Battery disconnect switch
Battery and battery rack w/cables

24-volt electric starting motor

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Description & Additional Notes

GENERAL

SAE standard rotation

Flywheel and Flywheel housing-SAE No. 00

RH Service

Paint - Caterpillar yellow with high gloss black rails & radiator

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Description & Additional Notes

3512B (50 HZ) OPTIONAL EQUIPMENT

AIR INLET SYSTEM

Air Inlet protection

Remote air inlet adaptors

Dual element air cleaners

EXHAUST

Exhaust mufflers

GENERATOR

Anti-condensation heater

Internal excitation (IE)

Permanent magnet excitation (PMG)

Oversize and premium generators

CIRCUIT BREAKERS

Cable entry options

2000, 2500, 3200 and 4000 Amp, 4 pole, IEC rated circuit breakers

Busbar connections

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Description & Additional Notes

Center posts busbars

Controls packaging - Enclosures

2000, 2500, 3200 and 4000 Amp, 3 pole, IEC rated circuit breakers

Optional busbar power connections

EMAX breakers connections

EMAX circuit breakers

Breaker harnesses

POWER TERMINATION

Circuit breakers, UL listed

Circuit breakers, IEC compliant

CONTROL PANELS

Annunciator modules

Customer connection mounting locations

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Description & Additional Notes

Local PC monitoring

Generator temperature monitoring

Auxiliary boxes

Governors

Customer interface options

EMCP 4.3, EMCP 4.4

Ground (Automatically selected)

Mounting group - External box clips

Vandal proof panel door

MOUNTING

Rubber anti-vibration mounts

IBC isolators

Spring-type vibration isolator

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Description & Additional Notes

STARTING/CHARGING

Oversize batteries
Air starting motor with control and silencer
Jacket water heater
Heavy-duty starting system
Charging alternator
Battery chargers

COOLING SYSTEM

Water level switch gauges
Optional radiator arrangements
Heat exchangers

EUROPEAN CERTIFICATIONS

European Union certification
EU declaration of conformity
European directive genset, DoI (Declaration of Incorporation)
Eurasian conformity (EAC) mark

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Description & Additional Notes

EXHAUST SYSTEM

Mufflers

Muffler mounting kits

Through-wall installation kit

Flexible fittings

FUEL SYSTEM

Primary fuel filter

GENERATORS AND ATTACHMENTS

Generator conversion

1500 RPM, 380/400/415volts @ 50 Hz, 3 phase, random wound, permanent magnet, No. of leads = 6, pitch= 0.6667

1500 RPM, 380/400/415volts @ 50 Hz, 3 phase, form wound, permanent magnet, No. of leads = 6, pitch= 0.6667

1500 RPM, 380/400/415volts @ 50 Hz, 3 phase, random wound, internal excitation, No. of leads = 6, pitch= 0.6667

Option 1



Harnessing Energy for Life

Description & Additional Notes

Local PC monitoring
Generator temperature monitoring
Auxiliary boxes
Governors
Customer interface options
EMCP 4.3, EMCP 4.4
Ground (Automatically selected)

Mounting group - External box clips
Vandal proof panel door

MOUNTING

Rubber anti-vibration mounts
IBC isolators
Spring-type vibration isolator

STARTING/CHARGING

Oversize batteries
Air starting motor with control and silencer
Jacket water heater
Heavy-duty starting system
Charging alternator
Battery chargers

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Description & Additional Notes

COOLING SYSTEM

Water level switch gauges
Optional radiator arrangements
Heat exchangers

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Flexible fittings

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1500 RPM, 380/400/415volts @ 50 Hz, 3 phase, random wound, internal excitation, No. of leads = 6, pitch= 0.6667

INSTRUMENTATION

Pyrometer and thermocouples

LUBE SYSTEM

Oil level Reg-1 shallow pan

Electric prelube pumps

Manual prelube sump pumps

MOUNTING SYSTEM

IBC vibration isolators

Spring-type vibration isolator

PROTECTION SYSTEM

Explosion relief valve

SPECIAL TESTS / REPORTS

PGS test report @ 0.80 power factor

Neutral ground-LV

IBC seismic certifications

PGS test report @ 1.0 power factor

Neutral grounding connection

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Description & Additional Notes

STARTING / CHARGING SYSTEM

Oversize battery set

Jacket water heaters

10 Amp battery chargers

Ether starting aid

24 Volt dual electric starting motor

20 Amp battery charger

GENERAL

Engine barring group

Option 1



Harnessing Energy for Life

Description & Additional Notes

STARTING / CHARGING SYSTEM

Oversize battery set

Jacket water heaters

10 Amp battery chargers

Ether starting aid

24 Volt dual electric starting motor

20 Amp battery charger

GENERAL

Engine barring group

Option 1



Harnessing Energy for Life

Description & Additional Notes

**Note that price is per unit

Images may be representative, and actuals can be supplied upon request.

USP&E offers complete turnkey design, installation, EPC and O&M services with PERFORMANCE GUARANTEES anywhere in the world (sanctioned countries only).

USP&E offers full warranty and guarantees on our EPC and O&M projects and couples this with our own proprietary power plant optimization software tool called SMARTpower.

SMARTpower offers predictive analytics and real-time reporting, spares control, and KPI management all in an elegant dashboard annunciated to your handheld.

With onboard predictive analytics powered by machine learning and advanced a.i., SMARTpower saves our clients millions of dollars per year in fuel and spares costs while optimizing asset life.

We look forward to working with you! Call or email us today at info@uspeglobal.com

Specifications

Option 1



Manufacturer	Caterpillar
Model	3512B
Year	2022
Condition	Refurbished
Location	Europe
Price	\$380,000.00
Category	Diesel Generators
Subcategories	•1 - 9 MW
Stock Number	USP010043
Serial Number	
Wattage	1.3 MW
Hours	Zero
Frequency	50 Hz
Fuel type	Diesel
Balance of Plant Available? (BOP)	-

Images of Your Asset

Option 2



Images of Your Asset

Option 2





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