

PRO Rental Product Range

PRO550-4

(EUV Compliant)

50/60Hz Switchable Rating

Prime Product

550 kVA / 440 kWe



KEY FEATURES

Rental Ready Features

- Forklift pockets
- Externally certified dual point lifting
- Integrated heavy duty drag pockets with robust skid plate
- EMI/EMC Certified
- Fully certified spark arresting silencer
- Optimized cable entry for easy hook-up
- Sound isolated control panel with integrated power distribution access.
- Robust hook-up point for lugged cable connection
- AC protected by limit switch on distribution door
- Emergency stop on control panel and enclosure

Engine

- Perkins 2806J-E18TAG1 four-stroke diesel engine combines consistent performance and excellent fuel economy with minimal weight

After Treatment

- Diesel Emissions Fluid (DEF) Tank

Fuel / Emissions Strategy

- EUV compliance

Single-Source Supplier

- Factory designed and fully prototype tested with certified torsion vibration analysis available
- ISO 9001:2000 compliant facility

DeepSea Control Panel

- Simple user friendly interface and navigation
- Single point interface for voltage / frequency adjustment

Alternator

- Leroy Somer Alternator
- Coastal insulation protection
- Self (shunt) excitation

Integrated Voltage Regulator (IVR)

- Three-phase sensing
- Adjustable volts-per-hertz regulation
- Provides precise control, excellent block loading, and constant voltage in the normal operating range.

Enclosure

- Galvanized sheet steel construction with two coat polyester powder-coated finish
- 5 Main doors and 2 service access doors (Lockable) for ease of maintenance
- Safety glass control panel viewing window with key lock
- Fuel fill and battery can only be reached through lockable access doors

Reduced Environmental Impact

- Dual wall base tank with 110% spill containment
- Bund Level alarm
- Low noise enclosure

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STANDARD EQUIPMENT

After Treatment

- Remote Mounted Clean Emissions Module (CEM)
- Diesel Emissions Fluid (DEF) Tank located in engine compartment

Air Inlet

- Two stage air cleaner with dust cup and service indicator
- Turbocharged, air-to-air aftercooler

Alternator

- LL6114K frame, three-phase, random wound, 6 lead design, self-excited, 2/3 pitch
- Coastal insulation protection

Charging System

- Charging alternator; 24V, heavy duty with integral regulator and belt guards

Control Panel

- DeepSea 7320 genset mounted digital controller
- Panel mounted Emergency stop switch
- Automatic set-point adjustment integrated with voltage and frequency changes
- Automatic Voltage Regulator D350
- Fully featured power metering, protective relaying and engine/generator control and monitoring

Cooling System

- Cooling package mounted radiator with vertical air discharge - 40°C high ambient capability
- Variable speed pusher fan with guards
- Coolant drain line with internal brass ball control valve piped to base-frame
- Low coolant level shutdown.
- 50% coolant antifreeze with corrosion inhibitor

Distribution System

- Robust steel enclosure, separate hinged, lockable door with rust resistant pinned hinges
- Main circuit breaker 4-pole, 1250A CB with 24V DC shunt trip wired to distribution door safety switch
- Two wire remote start/stop terminals and 230 VAC auxiliary power connection for rapid starting
- Cable support

Enclosure

- Sound attenuating, galvanized sheet metal enclosure with exceptional noise performance
- External emergency stop switch on enclosure
- Modular panel construction with a welded roof design
- Interior walls, ceilings and ducts insulated with precision cut noise insulating materials
- Sealed quarter turn compression door latches with key and padlock capabilities
- External side mounted dual point lifting frame
- Enclosure is protected by powder coated white paint

Engine

- Perkins 2806J heavy duty diesel engine
- Four-stroke diesel engine combines consistent performance and excellent fuel economy with minimum weight

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Exhaust System

- Integrated spark arresting silencer with flexible connectors, in separate compartment

Fuel System

- 1125L dual wall fuel tank, 12 hr runtime @ 75% prime rating, internal fuel fill
- Engine mounted primary fuel filter (10micron) with integral water separator and water in fuel sensor
- Off engine mounted Racor fuel water separator (4 micron) with secondary engine mounted fuel water separator
- Manual push button priming pump.
- Mechanical fuel gauge
- Configurable bund level sensor. High level warning.

Lube System

- On engine primary & secondary oil filters, filler and dipstick.
- Open crankcase breather with a fumes disposal container piped out to enclosure outlet box
- 500 hour oil change intervals

Mounting System

- Generator set soft mounted using captive vibration mounts
- Heavy duty steel base frame contains integral dual wall fuel tank
- Provides 110% spill containment of all engine fluids
- Forklift pockets and heavy duty pockets on side rails

Starting System

- Single electric starting motor, 24V

General

- Factory testing of standard generator set
- Full manufacturer's warranty, O&M manuals

AVAILABLE OPTIONS

- Synchronising control panel and motorised breaker
- Anti condensation heater 230V AC
- Coolant heater 230V AC
- Permanent Magnet Generator (PMG)
- Earth leakage detection
- Lube oil sump pump
- 24V battery charger
- Battery option - 2x 12V 950CCA maintenance-free CAT Batteries
- Fuel Option Pack - Inboard mounted 3-way valve for external fuel connection, electronic fuel gauge
- Battery Isolator - Single pole (padlockable)
- Drains option Pack - Oil and coolant drains piped to baseframe

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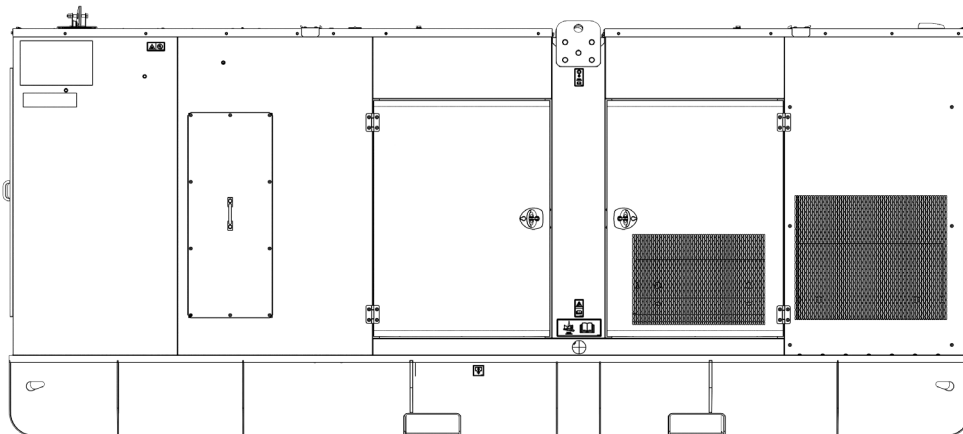
Power Ratings

Frequency	Voltage	kVA	kW	Output Amps (A)	Breaker Rating (A)
50 Hz	415/240V	550	440	765	1250
	400/230V	550	440	794	
	380/220V	550	440	836	
60 Hz	480/277V	588-	470-	707-	1250-
	440/254V	588-	470-	772-	
	380/220V	588-	470-	893-	
	240/139V	-	-	-	
	220/127V	-	-	-	

Ratings at 0.8 power factor.

Prime Rating: These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1 hour in 12 hours.

Power available at variable load with a load factor not exceeding 80% of the prime power rating in a 24 hour period.



Weights & Dimensions

Length (mm)						5420
Width (mm)						2040
Height (mm)						2434
Weight - Lube Oil & Coolant (kg)						6740
Weight - Lube Oil, Coolant & Fuel (kg)						7885

Sockets	15A	16A	32A	50A	63A	125A
CEE Form	—	2x1ph+N+E	2x3ph+N+E	—	1x3ph+N+E	1x3ph+N+E

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PRO550-4 Technical Data

Generator Set Technical Data

	Units	50 Hz	60 Hz
Power Rating	kW (kVA)	440 (550)	588 (470)
Oil pan capacity	L	70	70
Fuel consumption			
100% Load	L/hr	126.3	129.7
75% Load		94.5	98.8
50% Load		64.3	70.6
Fuel Tank Capacity	L	1125	1125
DEF Tank Capacity¥	L	92	92
Running Time (75% Load)	Hrs	11.9	11.4
Ambient Capability	°C	45	43
Radiator Coolant Capacity	L	54	54
Engine Coolant Capacity	L	27	27
Combustion Airflow	m3/min	32.4	37.2
Exhaust flow at rated – dry exhaust	m3/min	64.2	68.3
Exhaust temperature at rated kW	°C	547	520
Noise Rating			
Sound Power*		98	100
1m at 100% Load		81.42	83.08
7m at 100% Load		71.92	73.69
1m at 75% Load	dB(A)	79.19	82.12
7m at 75% Load		70.38	70.50

*Guaranteed sound power as per 2000/14/EC

¥ DEF consumption is on average approximately 4% of the fuel consumption. DEF tank capacity is sufficient to last more than 24hrs when fully filled.

Emissions Data

	Units	50 Hz	60 Hz
Nox	g/hp-hr	0.69	0.33
CO	g/hp-hr	0.01	0.0
HC	g/hp-hr	0.02	0.01
PM	g/hp-hr	0.00	0.01



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Perkins 2806J Engine Data

Engine	2806J-E18TAG1
Bore – mm	145
Stroke – mm	183
Displacement – L	18.1
Compression ratio	16.0:1
Engine RPM	1500
Aspiration	Turbocharged - Aftercooled (TA)
Aftercooler type	ATAAC
Turbocharger	Single
Fuel system	Direct Injection
Governor Type	Electronic ECM controlled (A6E2)
Fuel specification	Ultra Low Sulphur Diesel Only (ULSD)
Oil specification	15W-40 CK-4
Diesel Exhaust Fluid	ISO22241-1

Alternator Data

Frame Size	LL6114K
Pitch	2/3
No of Poles	4
Excitation	Static regulated, brushless, self-excited
No of Bearings	Single bearing, close coupled
Insulation Class	H
Temperature rise	125/40°C
Enclosure IP Rating	IP23
Overspeed Capability (% of rated)	25%
Voltage Regulator	3 phase sensing with adjustable Volts-per-Hz
Voltage regulation	Less than $\pm 0.5\%$
Telephone Harmonic Factor (THF)	Less than 2%
Total Harmonic Distortion (THD)	Less than 2%

* Materials and specifications are subject to change without notice.

Caterpillar (NI) Limited is the manufacturer of FG Wilson brand diesel generating sets, and our facilities manufacture products in the following locations:

Brazil • China • India

With headquarters in Northern Ireland, FG Wilson products are distributed through a Global Dealer Network.

To contact your local Sales Office, please visit the FG Wilson website at www.fgwilson.com.

In line with our policy of continuous product development, we reserve the right to change specification without notice.

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