

PRO Rental Product Range

PRO150-1

(EUIIIa Compliant)

PRO150-2

(EUIIIa Compliant)

50/60Hz Switchable Rating

Prime Product

150 kVA / 120 kWe



KEY FEATURES

Rental Ready Features

- Forklift pockets
- Fully certified single point lifting eye
- Integrated heavy duty drag bar with robust skid plate
- Coolant & oil drains piped to baseframe
- EMC Certified
- Fully certified spark arresting silencer
- 50/60 Hz switchable frequency via terminal link
- 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
- Inboard mounted 3 way fuel valve connection for external fuel connection

Engine

- Perkins Engine
- Fuel Optimised / EUIIIa emissions compliance offering

Single-Source Supplier

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

PowerWizard Control Panel

- Simple user friendly interface and navigation

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
- Six lockable (padlock / keylock) access doors for ease of maintenance
- Safety glass control panel viewing window with key lock

Reduced Environmental Impact

- EU3 emissions compliant (EU3 model)
- Dual wall base tank with 110% spill containment
- Bund Level alarm
- Exceptional noise performance Meets 92 dB(A) 50 Hz (EU3) Sound Power Limits (EU Machinery Directive)



PRO Rental Product Range

STANDARD EQUIPMENT

Air Inlet

- Air cleaner, two stage cyclonic/paper with dust cup and service indicator
- Turbocharger and air-to-air aftercooler

Alternator

- LL3114J frame, three-phase, random wound, 12-lead design, self-excited, 2/3 pitch
- Coastal insulation protection

Charging System

- Charging alternator; 12V, heavy duty with integral regulator and belt guards

Control Panel

- PowerWizard 2.1+ genset mounted digital controller
- 50/60Hz frequency switch via terminal link
- Panel mounted Emergency stop switch
- Automatic set-point adjustment integrated with voltage and frequency changes
- Integrated Voltage Regulator with EM10 Excitation Module
- Fully featured power metering, protective relaying and engine/generator control and monitoring

Cooling System

- Cooling package mounted radiator with high ambient capability
- 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, 250A with 24V DC shunt trip wired to distribution door safety switch
- Two wire remote start/stop terminals and 120-240 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
- Front and rear access provided through hinged doors
- External single point lifting
- Enclosure is protected by powder coated white paint

Engine

- Perkins 1106A / 1106D heavy duty diesel engine
- Four-stroke diesel engine combines consistent performance and excellent fuel economy with minimum weight
- ECM electronic engine control (EU3 model)
- Electronic Governed Engine (Fuel Optimised model)



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Exhaust System

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

Fuel System

- 156 gal (590 L) double wall fuel tank, 24 hr runtime @ 75% prime rating, internal fuel fill
- Engine mounted primary fuel filter (10micron) with integral water separator and Water in Fuel sensor (EU3 model)
- Off engine mounted Racor fuel water separator (30 micron) with secondary engine mounted fuel water separator (Fuel Optimised model)
- Manual Push Button priming pump.
- Auxiliary connections for customer supplied fuel transfer with 3 way fuel transfer system, internally mounted within the bunded area.
- Mechanical fuel gauge
- Electronic Fuel gauge with control panel display. Low level fuel warning & shutdown.
- Configurable bund level sensor. Low level warning & high level warning / shutdown.

Lube System

- On engine primary & secondary oil filters, filler and dipstick.
- Open crankcase breather with a fumes disposal container. Drain located on side of baseframe.
- Oil drain piped to edge of baseframe with internally mounted ball valve.
- 500 hour oil change intervals

Mounting System

- Generator set soft mounted using captive vibration mounts
- Heavy duty steel base frame contains integral fuel tank
- Provides 110% spill containment of all engine fluids
- Forklift pockets and heavy duty drag bar with skid plates

Starting System

- Single electric starting motor, 12V
- 2x 12V 950CCA maintenance free batteries (wired in parallel), with single pole battery isolator switch.
- 120/240 Volt single phase jacket water heater with thermostat and shut off valves

General

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

AVAILABLE OPTIONS

- CE socket box with integrated MCB and RCBO protection
- Clipsal socket box with integrated MCB and RCBO protection
- Anti-condensation heater 110 or 230 VAC
- Coolant heater 110 or 230 VAC
- 12V battery charger
- UL/CSA listed 120V, 20 Amp battery charger, shock mounted and enclosed in dust proof housing
- Permanent Magnet Generator (PMG)
- Earth Leakage
- CE labelling (also available for BSFC)
- Lube oil sump pump



PRO Rental Product Range

Power Ratings

| Frequency | Voltage | Prime kW (kVA) |
|---------------------|-----------|----------------|
| 50 Hz | 380/220 V | 120 (150) |
| PRO150-1 & PRO150-2 | 400/230 V | 120 (150) |
| | 415/240 V | 120 (150) |
| 60 Hz | 380/220 V | 128 (160) |
| | 440/254 V | 137 (172) |
| | 480/277 V | 137 (172) |
| | 220/127 V | 137 (172) |
| | 240/138 V | 137 (172) |
| 60 Hz | 380/220 V | 128 (160) |
| | 440/254 V | 145 (181) |
| | 480/277 V | 145 (181) |
| | 220/127 V | 148 (185) |
| | 240/138 V | 148 (185) |

Weights & Dimensions

| | |
|--|------|
| Length (mm) | 3520 |
| Width (mm) | 1120 |
| Height (mm) | 2226 |
| Weight - Lube Oil & Coolant (kg) | 2547 |
| Weight - Lube Oil, Coolant & Fuel (kg) | 3124 |



PRO Rental Product Range

PRO150-1 Technical Data

Generator Set Technical Data (Fuel Optimised)

| | UNITS | 50 Hz | 60 Hz |
|-------------------------------------|---------------|-------------|------------|
| Power Rating | kW (kVA) | 120 (150) | 137 (172) |
| Oil pan capacity | L (gal) | 12.4 (2.7) | 12.4 (2.7) |
| Fuel consumption | | | |
| 100% Load | L/hr (gal/hr) | 33.4 (7.34) | 38.2 (8.4) |
| 75% Load | | 24.7 (5.43) | 29.1 (6.4) |
| 50% Load | | 16.4 (3.6) | 19.1 (4.2) |
| Fuel Tank Capacity | L (gal) | 590 (130) | 590 (130) |
| Running Time (75% Load) | Hrs | 24 | 24 |
| Ambeint Capability | °C | 51 | 49 |
| Engine & Radiator Coolant Capacity | L (gal) | 21 (4.6) | 21 (4.6) |
| Engine Coolant Capacity | L (gal) | 9.5 (2.1) | 9.5 (2.1) |
| Combustion Airflow | m3/min | 10.2 | 10.2 |
| Exhaust flow at rated – dry exhaust | m3/min | 23.78 | 23.78 |
| Exhaust temperature at rated kW | °C | 484 | 484 |
| Noise Rating | | | |
| Sound Power* | | 93 | 96 |
| 1m at 100% Load | dB(A) | 78 | 82 |
| 7m at 100% Load | | 66 | 69 |
| 1m at 75% Load | | 77 | 82 |
| 7m at 75% Load | | 65 | 69 |

*Guaranteed sound power as per 2000/14/EC



PRO Rental Product Range

Perkins 1106A Engine Data (Fuel Optimised)

| | |
|--------------------------|-------------------------------|
| Engine | 1106A-70TAG2 |
| Bore – mm (in) | 105 mm (4.13 in) |
| Stroke – mm (in) | 135 mm (5.31 in) |
| Displacement – L (cu in) | 7.01 L (427 in ³) |
| Compression ratio | 18.2:1 |
| Engine RPM | 1500 / 1800 |
| Aspiration | TA |
| Aftercooler type | ATAAC |
| Turbocharger | Single |
| Fuel system | DP210 |
| Governor Type | A4:E2 |
| Fuel | Class A2 Diesel or BS-EN590 |

Alternator Data

| | |
|-----------------------------------|--|
| Frame Size | LL3114J |
| 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% |
| Harmonic Distortion (THD) | Less than 2% |

* Materials and specifications are subject to change without notice.



PRO Rental Product Range

PRO150-2 Technical Data

Generator Set Technical Data (EUIIIa)

| | UNITS | 50 Hz | 60 Hz |
|-------------------------------------|---------------------|-------------|-------------|
| Power Rating | kW (kVA) | 120 (150) | 145 (181) |
| Oil pan capacity | L (gal) | 12.4 (2.7) | 12.4 (2.7) |
| Fuel consumption | | | |
| 100% Load | L/hr (gal/hr) | 37.5 (8.24) | 42.3 (9.3) |
| 75% Load | | 29.6 (6.51) | 34.7 (7.63) |
| 50% Load | | 20.3 (4.46) | 23.8 (5.23) |
| Fuel Tank Capacity | L (gal) | 590 (130) | 590 (130) |
| Running Time (75% Load) | Hrs | 24 | 24 |
| Ambient Capability | °C | 46 | 46 |
| Engine & Radiator Coolant Capacity | L (gal) | 22 (4.6) | 22 (4.6) |
| Engine Coolant Capacity | L (gal) | 9.5 (2.1) | 9.5 (2.1) |
| Combustion Airflow | m ³ /min | 11.4 | 14.88 |
| Exhaust flow at rated – dry exhaust | m ³ /min | 26.4 | 30.57 |
| Exhaust temperature at rated kW | °C | 491 | 440 |
| Noise Rating | | | |
| Sound Power* | | 91 | 95 |
| 1m at 100% Load | dB(A) | 77 | 81 |
| 7m at 100% Load | | 65 | 68 |
| 1m at 75% Load | | 77 | 81 |
| 7m at 75% Load | | 64 | 67 |



PRO Rental Product Range

Perkins 1106D Engine Data (EUIIIa)

| | |
|--------------------------|-----------------------------|
| Engine | 1106D-E70TAG3 |
| Bore – mm (in) | 105 mm (4.13 in) |
| Stroke – mm (in) | 135 mm (5.31 in) |
| Displacement – L (cu in) | 7.01 L (427 in3) |
| Compression ratio | 16.8:1 |
| Engine RPM | 1500 / 1800 |
| Aspiration | TA |
| Aftercooler type | ATAAC |
| Turbocharger | Single |
| Fuel system | Electronic CRIN2 |
| Governor Type | A4:E2 |
| Fuel | Class A2 Diesel or BS-EN590 |

Alternator Data

| | |
|-----------------------------------|--|
| Frame Size | LL3114J |
| 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% |
| Harmonic Distortion (THD) | Less than 2% |

* Materials and specifications are subject to change without notice.

FG Wilson manufactures product in the following locations:

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

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