

# 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)



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## 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



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## 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 <sup>3</sup> )
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 <sup>3</sup> /min	11.4	14.88
Exhaust flow at rated – dry exhaust	m <sup>3</sup> /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%

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### FG Wilson manufactures product in the following locations:

Northern Ireland • Brazil • China • India • USA

With headquarters in Northern Ireland, FG Wilson operates through a Global Dealer Network.

To contact your local Sales Office please visit the FG Wilson website at [www.FGWilson.com](http://www.FGWilson.com).

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