

PRO30-2

(R96 EUIIIa Equivalent)

50/60 Hz Switchable Rating Prime Product 30 kVA / 24 kWe



KEY FEATURES

Rental Ready Features

- 24 hour dual wall tankbase
- Forklift pockets
- Fully certified single point lifting eye
- · Integrated heavy duty drag points 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 four-stroke diesel engine
- Electronic governor, mechanical actuator
- R96 EUIIIa equivalent

Single-Source Supplier

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

PowerWizard Control Panel

- Fully featured power metering, protective relaying, and engine/generator control and monitoring
- Simple user friendly interface and navigation
- Automatic set-point adjustment integrated with voltage and frequency changes

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
- Fuel fill and battery can only be reached through lockable access doors

Reduced Environmental Impact

- R96 EUIIIa equivalent
- Dual wall base tank with 110% spill containment
- CE labelling
- Bund Level alarm
- Exceptional noise performance Meets 87 dBA LWA 50 Hz
 (EUIIIa) Sound Power Limits (EU Machinery Directive)



STANDARD EQUIPMENT

Air Inlet

• Air cleaner with dust cup and service indicator

Alternator

- LL1514F 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
- 50/60 Hz 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

- Package mounted radiator with high ambient capability
- Fully guarded pusher fan
- 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, 63A with 12V 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 though hinged doors
- External single point lifting
- Enclosure is protected by powder coated white paint

Engine

- Perkins 1103D heavy duty diesel engine
- Four-stroke diesel engine combines consistent performance and excellent fuel economy with minimum weight
- Electronic governed engine



Exhaust System

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

Fuel System

- 162L fuel tank, internal fuel fill. 24 hour based on 75% prime rating
- Primary fuel filter (30 micron) with integral water separator
- 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
- Bund level sensor. High level warning / shutdown

Lube System

- On engine primary & secondary oil filters, filler and dipstick
- Closed crankcase breather
- 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 points with skid plates

Starting System

- Single electric starting motor, 12V
- 12V 950CCA maintenance free battery, with single pole battery isolator switch
- 120/240 Volt single phase jacket water heater with thermostat

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 120 V, 20 Amp battery charger, shock mounted and enclosed in dust proof housing
- Permanent Magnet Generator (PMG)
- Earth Leakage
- Lube oil sump pump
- DeepSea 7320



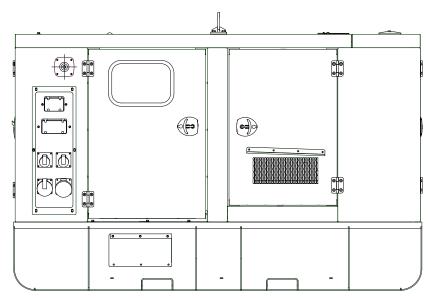
Power Ratings

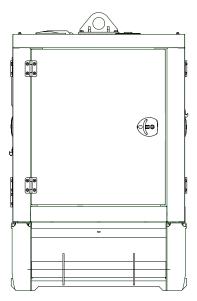
| Frequency | Voltage | kVA | kW | Output Amps (A) | Breaker Rating (A) |
|-----------|----------|------|------|-----------------|--------------------|
| | 415/240V | 30 | 24 | 42 | |
| 50 Hz | 400/230V | 30 | 24 | 43 | 63 |
| | 380/220V | 30 | 24 | 46 | |
| | 480/277V | 35.8 | 28.6 | 43 | |
| | 440/254V | 35.8 | 28.6 | 47 | 63 |
| 60 Hz | 380/220V | 34.5 | 27.6 | 52 | |
| | 240/139V | 35.8 | 28.6 | 86 | 125 |
| | 220/127V | 35.8 | 28.6 | 94 | 125 |

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 - A (mm) | 2150 |
|--|------|
| Width - B (mm) | 1120 |
| Height - C (mm) | 1583 |
| Weight - Lube Oil & Coolant (kg) | 1230 |
| Weight - Lube Oil, Coolant & Fuel (kg) | 1385 |
| | |

| Sockets | 15A | 16A | 32A | 50A | 63A | 125A |
|---------------------|-----------|-----------|-----------|-----|-----|------|
| Clipsal* | 2x1ph+N+E | _ | 1x3ph+N+E | _ | _ | _ |
| Sockets (CEE Form)* | _ | 2x1ph+N+E | 1x3ph+N+E | _ | - | - |

*Busbar connection is standard. Distribution sockets are optional.



PRO30-2 Technical Data

Generator Set Technical Data

| | UNITS | 50 Hz | 60 Hz |
|-------------------------------------|----------|---------|-------------|
| Power rating | kVA (kW) | 30 (24) | 35.8 (28.6) |
| Oil pan capacity | L | 7 | 7 |
| Fuel consumption | | | |
| 100% load | | 8.0 | 9.1 |
| 75% load | L/hr | 6.1 | 7.1 |
| 50% load | | 4.4 | 4.9 |
| Fuel tank capacity | L | 162 | 162 |
| Running time (75% load) | Hrs | 24 | 21 |
| Ambient capability | °C | 55 | 50 |
| Engine & radiator coolant capacity | L | 10.2 | 10.2 |
| Engine coolant capacity | L | 4.4 | 4.4 |
| Combustion airflow | m³/min | | |
| Exhaust flow at rated – dry exhaust | m³/min | 5.3 | 6.1 |
| Exhaust temperature at rated kW | °C | 515 | 530 |
| Noise rating | | | |
| Sound power* | | 87 | 88 |
| 1m at 100% load | dB(A) | 71 | 73 |
| 7m at 100% load | | 61 | 62 |
| 1m at 75% load | | 71 | 72 |
| 7m at 75% load | | 60 | 61 |

*Guaranteed sound power as per 2000/14/EC



Perkins 1103D Engine Data

| Engine | Perkins CE |
|--------------------------|--|
| Bore – mm (in) | 105 mm |
| Stroke – mm (in) | 127 mm |
| Displacement – L (cu in) | 3.3 L |
| Compression ratio | 19.25 : 1 |
| Engine RPM | 1500 / 1800 |
| Aspiration | Naturally Aspirated (NA) |
| Aftercooler type | N/A |
| Turbocharger | N/A |
| Fuel system | Direct Injection, Rotary Pump |
| Governor type | Electronic Governor, Mechanical Actuator |
| Fuel | Class A2 Diesel or BS-EN590 |
| | |

Alternator Data

| Frame Size | LL1514F |
|-----------------------------------|--|
| Pitch | 2/3 |
| No of Poles | 4 |
| Excitation | Static regulated, brushless, self-excited |
| No of Bearings | Single bearing, close coupled |
| Insulation Class | Н |
| 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.

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