

## PRO60-2

(R96 EUIIIa Equivalent)

50/60 Hz Switchable Rating Prime Product 60 kVA / 48 kWe



#### **KEY FEATURES**

#### **Rental Ready Features**

- 24 hour dual wall tankbase
- · 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 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 reachedthrough 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 (TBC) LWA 50 Hz (EUIIIa) Sound Power Limits (EU Machinery Directive)



### STANDARD EQUIPMENT

#### **Air Inlet**

- · Air cleaner with dust cup and service indicator
- Turbocharger and air-to-air aftercooler

#### **Alternator**

- LL1514P 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**

- · 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, 125A 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 1104D heavy duty diesel engine
- Four-stroke diesel engine combines consistent performance and excellent fuel economy with minimum weight
- ECM electronic engine control



#### **Exhaust System**

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

#### **Fuel System**

- 301L double wall fuel tank, internal fuel fill. 24 hour based on 75% prime rating
- Engine mounted primary fuel filter (30 micron) with integral water separator and Water in Fuel sensor
- · 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
- 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
- · 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
- 12V 950CCA maintenance free battery, 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 120 V, 20 Amp battery charger, shock mounted and enclosed in dust proof housing
- Permanent Magnet Generator (PMG)
- Earth Leakage
- CE labelling
- Lube oil sump pump



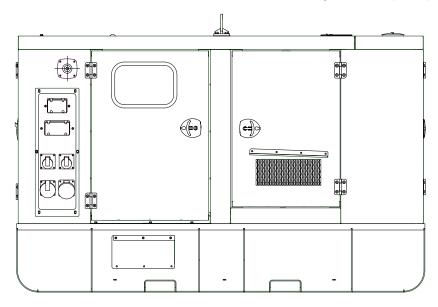
### **Power Ratings**

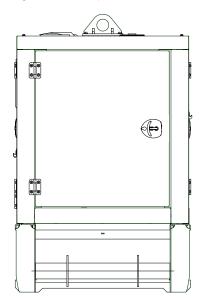
Frequency	Voltage	Prime kW (kVA)	Output Amps (A)	Breaker Rating (A)
	415/240V	48 (60)	83	
50 Hz	400/230V	48 (60)	86	125
	380/220V	48 (60)	91	
	480/277V	54.2 (60)	82	
	440/254V	54.4 (60)	89	200
60 Hz	380/220V	47.2 (60)	90	
	240/139V	54.2 (60)	164	125
	220/127V	54.2 (60)	178	125

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)					2610
Width - B (mm)					1120
Height - C (mm)					1776.5
Weight - Lube Oil & Coolant (kg)					1715
Weight - Lube Oil, Cod	olant & Fuel (kg)				2029
Sockets	15A	16A	32A	50A	63A
Clipsal	2x 1ph+N+E	=	1x 3ph+N+E	-	-
Sockets (CEE Form)	-	2x 1ph+N+E	1x 3ph+N+E	_	1 x 3ph+N+E



## **PRO60-2 Technical Data**

Generator Set Technical Data			
	UNITS	50 Hz	60 Hz
Power rating	kW (kVA)	48 (60)	68 (54)
Oil pan capacity	L	7	7
Fuel consumption			
100% load 75% load 50% load	L/hr	16.5 12.4 8.3	18.8 14.4 9.8
Fuel tank capacity	L	301	301
Running time (75% load)	Hrs	24	21
Ambient capability	°C	48	49
Engine & radiator coolant capacity	L	13	13
Engine coolant capacity	L	7	7
Combustion airflow	m³/min	4.7	5.8
Exhaust flow at rated – dry exhaust	m³/min	11.5	13.5
Exhaust temperature at rated kW	°C	540	542
Noise rating			
Sound power*		TBD	TBD
1m at 100% load 7m at 100% load	dB(A)	TBD TBD	TBD TBD
1m at 75% load 7m at 75% load		TBD TBD	TBD TBD

<sup>\*</sup>Guaranteed sound power as per 2000/14/EC



## **Perkins 1104D Engine Data**

Engine	Perkins 1104D-44TG2
Bore – mm (in)	105 mm (4.13 in)
Stroke – mm (in)	127 mm (50 in)
Displacement – L (cu in)	4.4 L (268 in3)
Compression ratio	18.23:1
Engine RPM	1500 / 1800
Aspiration	Turbocharged
Aftercooler type	N/A
Turbocharger	Single
Fuel system	Direct Injection
Governor type	Mechanical Actuator
Fuel	Class A2 Diesel or BS-EN590

#### **Alternator Data**

Frame Size	LL1514P
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%

<sup>\*</sup> Materials and specifications are subject to change without notice.

#### 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.

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