

PRO Rental Product Range

PRO20-4

(EUV Compliant)

50Hz Prime Product

20kVA/16kW

50Hz Standby Product

22kVA/ 17.6kW



KEY FEATURES

Rental Ready Features

- Forklift pockets
- Fully certified single point lifting
- Integrated drag points
- Coolant & oil drain extension pipes
- 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
- Inboard mounted 3 way fuel valve connection for external fuel connection

Engine

- Perkins 404J-22G four-stroke diesel engine combines consistent performance and excellent fuel economy with minimal weight

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

Enclosure

- Galvanized sheet steel construction with two coat polyester powder-coated finish
- 3 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

- Dual wall base tank with 110% spill containment
- Bund Level alarm
- 73 dB sound pressure @ 75% load 1M
- 64 dB sound pressure @ 75% load 7M



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STANDARD EQUIPMENT

Air Inlet

- Air cleaner with dust cup and service indicator
- Twin turbocharger and air-to-air aftercooler

Alternator

- LL1114M 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

- DeepSea 6320 genset mounted digital controller
- Panel mounted Emergency stop switch
- Fully featured power metering, protective relaying and engine/generator control and monitoring

Cooling System

- Cooling package mounted radiator with vertical air discharge - 43°C high ambient capability
- Coolant drain line with internal brass ball control valve with pipe extension
- 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 40A with 12V DC shunt trip wired to distribution door safety switch
- Two wire remote start/stop terminals and 230 VAC auxiliary power connection for rapid starting

Enclosure

- Extended base frame for enclosure protection
- 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
- Side access provided through hinged doors
- Enclosure is protected by powder coated white paint

Engine

- Perkins 404J-22G engine
- Four-stroke diesel engine combines consistent performance and excellent fuel economy with minimum weight

Exhaust System

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



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Fuel System

- 56L dual wall fuel tank, 13 hr runtime @ 75% prime rating, internal fuel fill
- Engine mounted fuel filter, separately mounted separate water separator
- Manual fuel 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.
- Closed circuit crankcase breather
- 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 drag bar with skid plates

Starting System

- Single electric starting motor, 12V

General

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

AVAILABLE OPTIONS

- Socket box with integrated MCB & RCBO protection
- Anti-condensation heater 230 VAC
- Coolant heater 230 VAC
- Air cleaner cyclonic paper with dust cup and service indicator
- 12V 750CCA maintenance free batteries with single pole battery isolator switch
- 12V battery charger
- Earth Leakage
- CE labelling
- Lube oil sump pump

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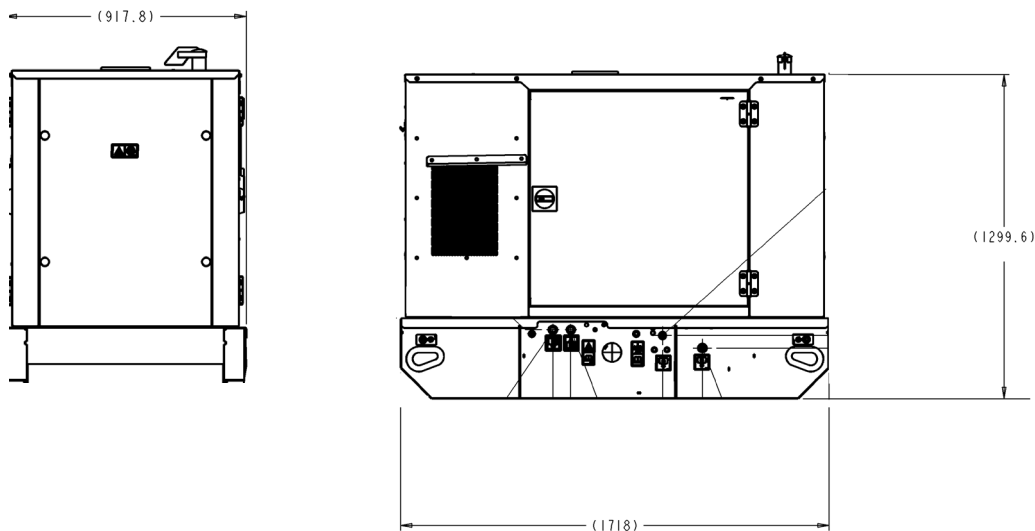
Power Ratings

Frequency	Voltage	kVA	kW	Output Amps (A)	Breaker Rating (A)
50 Hz	415/240V	20	16	28	40
	400/230V	20	16	29	
	380/220V	20	16	31	

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)				1718
Width (mm)				918
Height (mm)				1300
Weight - Lube Oil & Coolant (kg)				735
Weight - Lube Oil, Coolant & Fuel (kg)				745

Sockets	15A	16A	32A
CEE Form	–	2x1ph+N+E	1x3ph+N+E



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PRO20-4 Technical Data

Generator Set Technical Data

	Units	50 Hz
Power Rating	kW (kVA)	16 (20kVA)
Oil pan capacity	L	6
Fuel consumption		
100% Load	L/hr	5.5
75% Load		4
50% Load		3
Fuel Tank Capacity	L	56
Running Time (75% Load)	Hrs	13
Ambeint Capability	°C	45
Engine & Radiator Coolant Capacity	L	10.6
Engine Coolant Capacity	L	7
Combustion Airflow	m3/min	2
Exhaust flow at rated – dry exhaust	m3/min	3.64
Exhaust temperature at rated kW	°C	490
Noise Rating		
Sound Power*		88
1m at 100% Load		74
7m at 100% Load	dB(A)	65
1m at 75% Load		73
7m at 75% Load		65
1m at 50% Load		72
7m at 50% Load		64

*Guaranteed sound power as per 2000/14/EC

Emissions Data

	Units	50 Hz	60 Hz
NOx	gms/ kW-H	-	
CO	gms/ kW-H	1.25	
HC	gms/ kW-H	-	
PM	gms/ kW-H	0.25	
HC+NOx	gms/ kW-H	3.72	



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Engine Data

Engine	404J-22G
Bore – mm	84
Stroke – mm	100
Displacement – L	2.2
Compression ratio	23:1
Engine RPM	1500
Aspiration	Naturally Aspirated
Fuel system	Indirect Injection
Governor Type	Mechanical
Fuel specification	Ultra Low Sulphur Diesel Only (ULSD)
Oil specification	15W-40 CH-4

Alternator Data

Frame Size	LL1114M
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	R220
Voltage regulation	Less than $\pm 0.5\%$
Telephone Harmonic Factor (THF)	Less than 2%
Total Harmonic Distortion (THD)	Less than 5%

* Materials and specifications are subject to change without notice.

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