

500kVA (K550PE) Rigsafe Diesel Generator

CUSTOMISING PORTABLE POWER WITH PROVEN, EFFECTIVE DESIGN AND QUALITY SERVICE



Rigsafe Generators 30kVA up to 500kVA
Acoustic canopy c/w DNV shipping frame



Rigsafe Generators 800kVA up to 1500kVA
Acoustic containers c/w 4 point DNV 2.7-1 lifting

Based in Aberdeen, the oil capital of Europe, this Portable Power division can supply diesel driven generators for rental from 30kVA to 1500kVA. The generators are built to “rigsafe” specification, designed to work in the harsh offshore environment, either on oil platforms or wind turbines. These generators can also be used onshore in various industry sectors such as construction and entertainment.

The capital sales division can supply standard off the shelf generators or project specific custom built generators and offer the full spectrum of engineering from design, fabrication and assembly through to the FAT (Factory Acceptance Test).

The service division can provide a full health care package for diesel driven generators, comprising of installation, maintenance and repair of customer owned equipment.

Generators supplied for rental have the following features:

- Spark Arrestor on Engine Exhaust Outlet
- Chalwyn valve or Amot valve inline with Engine
- Aspiration
- External Emergency Stop
- Platform Interface for ESD start and stop
- (24Volt or 110Volt)
- Unit alarms and shutdown on:
 - Low Oil Pressure
 - High Engine Temperature
 - Over speed
- Lifting certificates for unit, slings and shackles (MPI and Tested)

Optional Fire Detection, Gas Detection and Extinguishing System

The generators can have a Fire/Gas Detection system installed for certain applications:

- Heat Detection
- Smoke Detection
- Gas Detection
- Fire/Gas Detection Panel
- External Controls and Status Indication
- Extinguishing System c/w internal and external pipework

The installation of a generator set must follow certain rules, which must be strictly adhered to in order to get the equipment to operate properly.

Highly skilled generator engineers will carry out all works to ensure the safe installation and commissioning of your generator.

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Specifications and Dimensions

GENERAL			
Drive-Unit	Diesel Engine	Unit Type	K 550 PE
Driven Equipment	Alternator	Rated Speed	1500/50 rpm/hz; 1800/60 rpm/hz
Duty	Prime Power	Operation/Maint. Manual	Standard Issue
Drive	Direct	Enclosure	Sound-Attenuated Canopy-Type
Cooling	Radiator	Lifting specification	In accordance with DNV 2.7-1 when in frame
Suitable for operating in:	SAFE-AREA OFFSHORE	Noise Attenuation	85 dBA within 1 mt of skid enclosure

GENERATOR SET RATINGS			
50 Hz Prime Power	kVA (kw) 500 (400)	50 Hz Standby Power	kVA (kw) 550 (440)
60 Hz Prime Power	kVA (kw) 500 (400)	60 Hz Standby Power	kVA (kw) 563 (450)

ENGINE			
Manufacturer	Perkins	Cylinders	6 in line
Disp.	15 Litre	Bore	137 mm
Engine Type	2506C-E15TAG2	Stroke	171 mm
Aspiration	Twin Turbocharged and Jacket Water After-Cooled	Compression Ratio	16.1 : 1
Classification	ISO 8528/1, ISO 3046/1, BS 5514/1	Maximum Allowable Speed	2000
50 Hz Gross Power	kWm 451	60 Hz Gross Power	kWm 458
Start System	Electric 24vDC	Batteries	2 x 12vDC

ALTERNATOR			
Manufacturer	Leroy Somer	Type	LSA 47.2M7 C 6/4
50 Hz Prime Power	500kVA @ 400v; 0.8 pf	60 Hz Prime Power	570kVA @ 400v; 0.8 pf
50 Hz Standby Power	630kVA @ 400v; 0.8 pf	60 Hz Standby Power	690kVA @ 440v; 0.8 pf
Short Circuit Transient Time Constant	T`d 100ms	Transient Reactance	X`d 15.9ms
Volts	380 - 440V @ 50Hz 420 - 480V @ 60Hz		

INSTRUMENTATION AND CONTROLS			
Instrument Panel	Skid Mounted Service Hour Meter Emergency Stop	Gauges	Water Temperature Oil Pressure Speed Indicator
Controls	Off / Manual / Auto (Local and Remote) E.S.D. Interface	Safety Systems	High Engine Temperature Low Oil Pressure Overspeed
Control System	Manufacturer - Deepsea Controls Type - DSE 7510	Output	M.C.C.B NS800N 3 Pole 800Amp Protection - Long-Time/Short-Time
Earth Leakage	Merlin Gerin VIGEREX RH99M	Operation Modes	Suitable for AMF application Synchronisation and load share between multiple sets

DIMENSIONS / WEIGHTS	L x W x H	WEIGHT	
Enclosed Gen-Set	4800 mm x 1900 mm x 2655 mm	Dry - 6430 kg	Wet - 9795 kg
Enclosed Gen-Set in DNV Frame	5490 mm x 2199 mm x 3230 mm	Dry - 8540 kg	Wet - 11895 kg

CAPACITY / OPERATIONS / SERVICE			
Fuel Tank Cap	1750 Lts	Service Intervals	<ul style="list-style-type: none"> Type (A) Oil and Filter change - 400 Hrs Type (B) Type (A) service plus injector and tappet inspection/change - 2,500 Hrs
Oil	62 Lts		
Coolant	58 Lts		
Fuel Usage - 50 Hz	106 Lts/Hour @ 100% duty 81 Lts/Hour @ 75% duty 55 Lts/Hour @ 50% duty	Fuel Usage - 60 Hz	100 Lts/Hour @ 100% duty 77 Lts/Hour @ 75% duty 55 Lts/Hour @ 50% duty