

## 100kVA (K120C) Rigsafe Diesel Generator

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# CUSTOMISING PORTABLE POWER WITH PROVEN, EFFECTIVE DESIGN AND QUALITY SERVICE

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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 120 C		
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	80 dBA within 1 mt of skid enclosure		
GENERATOR SET RATINGS					
50 Hz Prime Power	kVA (kW) 105 (84)	50 Hz Standby Power	kVA (kW) 110 (98)		
60 Hz Prime Power	kVA (kW) 117 (94)	60 Hz Standby Power	kVA (kW) 125 (100)		
ENGINE					
Manufacturer	Cummins	Cylinders	6 in line		
Disp.	8.8 Litre	Bore	102 mm		
Engine Type	6BT5.9-G6	Stroke	120 mm		
Aspiration	Turbocharged	Compression Ratio	16.5 : 1		
Classification	ISO 8528/1, ISO 3046/1, BS 5514/1	Maximum Allowable Speed	2000		
50 Hz Gross Power	kWm 97	60 Hz Gross Power	kWm 115		
Start System	Electric 12vDC	Batteries	1 x 12vDC		
ALTERNATOR					
Manufacturer	Leroy Somer	Type	LSA 44.2VS4		
50 Hz Prime Power	105 kVA @ 0.8 pf	60 Hz Prime Power	117 kVA @ 0.8 pf		
50 Hz Standby Power	110 kVA @ 0.8 pf	60 Hz Standby Power	125 kVA @ 0.8 pf		
Sub-Transient Reactance	X`d 10.00%	Transient Reactance	X`d 12.80%		
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 5310	Output	M.C.C.B NR160F 4 Pole 160Amp TM160D Adjustable Protection - Long-Time/Short-Time		
Earth Leakage	Merlin Gerin VIGEREX RH99M (for main output MCB and the 3-Phase Socket Outlet)	Operation Modes	Suitable for AMF application		
Socket Outlets	415/440v 1 x 63amp 5 pin c/w 4 pole mcb 240v 2 x 32amp 3 pin c/w 2 pole mcb				
DIMENSIONS / WEIGHTS		L x W x H		WEIGHT	
Enclosed Gen-Set		2550 mm x 1115 mm x 1645 mm		Dry - 1700 kg	Wet - 1900 kg
Enclosed Gen-Set in DNV Frame		2850 mm x 1400 mm x 2425 mm		Dry - 3240 kg	Wet - 3440 kg
CAPACITY / OPERATIONS / SERVICE					
Fuel Tank Cap	200 Lts	Service Intervals	<ul style="list-style-type: none"> <li>Type (A) Oil and Filter change - 400 Hrs</li> <li>Type (B) Type (A) service plus injector and tappet inspection/change - 2,500 Hrs</li> </ul>		
Oil	14.2 Lts				
Coolant	10 Lts				
Fuel Usage - 50 Hz	24 Lts/Hour @ 100% duty 18 Lts/Hour @ 75% duty 13 Lts/Hour @ 50% duty 7 Lts/Hour @ 25% duty	Fuel Usage - 60 Hz	29 Lts/Hour @ 100% duty 22 Lts/Hour @ 75% duty 16 Lts/Hour @ 50% duty 9 Lts/Hour @ 25% duty		