

## 100kVA (KF110P) 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	KF 110 P
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	65.2 dBA within 7 mt of skid enclosure

GENERATOR SET RATINGS			
50 Hz Prime Power	kVA (kw) 100 (80)	50 Hz Standby Power	kVA (kw) 110 (88)
60 Hz Prime Power	kVA (kw) 113 (90.4)	60 Hz Standby Power	kVA (kw) 125 (100)

ENGINE			
Manufacturer	Perkins	Cylinders	4 in line
Disp.	4.4 Litre	Bore	105 mm
Engine Type	1104C-44TAG2 EU Stage II Emissions Compliant	Stroke	127 mm
Aspiration	Turbocharged Air to Air Charge Cooled	Compression Ratio	18.3 : 1
Classification	ISO 8528/1, ISO 3046/1, BS 5514/1	Maximum Allowable Speed	2000
50 Hz Gross Power	kWm 93.5	60 Hz Gross Power	kWm 105

ALTERNATOR			
Manufacturer	Olympian	Type	LL3014B
50 Hz Prime Power	110kVA @ 415V 0.8 pf	60 Hz Prime Power	127kVA @ 440V 0.8 pf
50 Hz Standby Power	110kVA @ 415V 0.8 pf	60 Hz Standby Power	127kVA @ 440V 0.8 pf
Reactance per Unit	Xd 3.51, X'd 0.140, X''d 0.082	<i>Alternator is suitable for severe industrial environment, marine and coastal areas.</i>	
Volts	380 - 440V @ 50Hz 380 - 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 - FG Wilson Type - 4001	Output	M.C.C.B ABB TMAX 4 Pole 200 Amp Protection - ABB PR221DS Electronic Protection Relay
Earth Leakage	Adjustable Range 30-100mA c/w x1, x10, x100 multiplier. Adjustable time delay.	Socket Outlets	(1Ph) 3 x 16A 240V, (3Ph) 3 x 32A 415/440V 5 Pin 2 x 63A 415/440V 5 Pin
Operation Modes	Suitable for AMF application		

DIMENSIONS / WEIGHTS	L x W x H	WEIGHT	
Onshore Unit	3280 mm x 1130 mm x 2060 mm	Dry - 2400 kg	Wet - 3100 kg
Offshore Unit	4680 mm x 1800 mm x 3160 mm	Dry - 3900 kg	Wet - 4600 kg
<i>Dry Weights are given with oil and coolant but excluding fuel.</i>			

CAPACITY / OPERATIONS / SERVICE			
Fuel Tank Cap	935 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	26.5 Lts		
Coolant	11 Lts		
Fuel Usage - 50 Hz	22.6 Lts/Hour @ 100% duty 17.1 Lts/Hour @ 75% duty 11.2 Lts/Hour @ 50% duty		