

# 1250kVA (KS1400CFG) Rigsafe Diesel Generator with Built-in Fire/Gas Detection System

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



Containerised Zone 2 200kVA generator



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

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.

# Specification Sheet

## 1250kVA (KS1400CFG) Rigsafe Diesel Generator with Built-in Fire/Gas Detection System

General			
<b>Drive-unit</b>	Diesel engine	<b>Unit type</b>	KS 1400 CFG
<b>Driven equipment</b>	Alternator	<b>Rated speed</b>	1500/50 rpm/hz; 1800/60 rpm/hz
<b>Duty</b>	Prime power	<b>Operation/maint. manual</b>	Standard issue
<b>Drive</b>	Direct	<b>Enclosure:</b>	Container built to DNV 2.7-1
<b>Cooling</b>	Radiator	<b>Lifting specification</b>	In accordance with DNV 2.7-1 when in frame
<b>Unit is suitable for operating in</b>	SAFE-AREA OFFSHORE	<b>Noise attenuation</b>	85 dBA within 1 meter of skid enclosure

Generator set ratings			
<b>50 hz prime power</b>	kVA (kw) 1250 (1000)	<b>50 hz standby power</b>	kVA (kw) 1406 (1120)
<b>60 hz prime power</b>	kVA (kw) 1375 (1100)	<b>60 hz standby power</b>	kVA (kw) 1500 (1200)

Engine			
<b>Manufacturer</b>	Cummins	<b>Cylinders</b>	V16
<b>Disp.</b>	50.3 litre	<b>Bore</b>	159 mm
<b>Engine type</b>	KTA50-G3	<b>Stroke</b>	159 mm
<b>Aspiration</b>	Twin turbocharged and jacket water after-cooled	<b>Maximum allowable speed</b>	2100
<b>Classification</b>	ISO 8528/1, ISO 3046/1, BS 5514/1	<b>Compression Ratio</b>	14.0 : 1
<b>50 hz gross power</b>	kWm 1227	<b>60 hz gross power</b>	kWm 1380
<b>Cummins oil pan</b>	6024	<b>Degrees front up/down</b>	30
<b>Start System</b>	Electric 24vDC	<b>Degrees side to side</b>	30
<b>Batteries</b>	4 x 12vDC 800CCA-OPTIMA RED TOP	<b>Rating</b>	200 amp/hr

Alternator			
<b>Manufacturer</b>	Stamford	<b>Type</b>	P1734B
<b>50 hz prime power</b>	1400kVA @ 0.8 pf	<b>60 hz prime power</b>	1460kVA @ 0.8 pf
<b>50 hz standby power</b>	1625kVA @ 0.8 pf	<b>60 hz standby power</b>	1690kVA @ 0.8 pf
<b>Sub-transient reactance</b>	X'd 14% @ 50 hz	<b>Transient reactance</b>	X'd 18% @ 50 hz
<b>Volts</b>	380 - 440V @ 50hz; 420 - 480V @ 60hz	<b>AVR type</b>	MX321

Instrumentation and controls			
<b>Instrument panel</b>	• Skid mounted	• Service hour meter	• Emergency stop
<b>Gauges</b>	• Water temperature	• Oil pressure	• Speed indicator
<b>Controls</b>	• Off/manual/auto (local and remote)	• E.S.D. interface	-
<b>Safety systems</b>	• High engine temperature	• Low oil pressure	• Overspeed
<b>Control system</b>	• Deepsea	-	-
<b>Output</b>	• Merlin GERIN NW25H	• 4 Pole 2500Amp	• Adjustable electronic protection relay
<b>Earth leakage</b>	• Merlin Gerin VIGEREX RH99M	-	-
<b>Operation modes</b>	• Suitable for AMF application	• Synchronisation and load share between multiple sets	

Self contained fire/gas detection and CO2 extinguishing system

Dimensions/weights			
<b>Containerised gen-set dimensions L x W x H</b>	6050 mm x 2430 mm x 2850 mm	<b>Containerised gen-set weights</b>	Dry - 20000 kg Wet - 21000 kg

Capacities/operations/service			
<b>Fuel tank cap</b>	900 lts	<b>Service intervals</b>	Type (A) oil and filter change - 400 hrs
<b>Oil</b>	177 lts		Type (B) Type (A) service plus injector
<b>Coolant</b>	218 lts		and tappet inspection/change - 2,500 hrs
<b>Fuel usage - 50 hz</b>	261 lts/hour @ 100% duty	<b>Fuel usage - 60 hz</b>	291 lts/hour @ 100% duty
	199 lts/hour @ 75% duty		222 lts/hour @ 75% duty
	139 lts/hour @ 50% duty		157 lts/hour @ 50% duty
	76 lts/hour @ 25% duty		89 lts/hour @ 25% duty

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