

1250kVA (K1400CFG) 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 (K1400CFG) Rigsafe Diesel Generator with Built-in Fire/Gas Detection System

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

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

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

Alternator			
Manufacturer	Stamford	Type	P1734B
50 hz prime power	1400kVA @ 0.8 pf	60 hz prime power	1460kVA @ 0.8 pf
50 hz standby power	1625kVA @ 0.8 pf	60 hz standby power	1690kVA @ 0.8 pf
Sub-transient reactance	X'd 14% @ 50 hz	Transient reactance	X'd 18% @ 50 hz
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	• Deepsea controls	-	-
Output	• ABB T8	• 4 Pole 2000Amp	• Adjustable electronic protection relay
Earth leakage	• Merlin Gerin VIGEREX RH99M	-	-
Operation modes	• Suitable for AMF application	• Synchronisation and load share between multiple sets	

Self contained fire/gas detection and CO2 extinguishing system

Dimensions/weights			
Containerised gen-set dimensions L x W x H	6500 mm x 2896 mm x 3078 mm	Containerised gen-set weights	Dry - 20000 kg Wet - 21500 kg

Capacities/operations/service			
Fuel tank cap	1500 lts	Service intervals	Type (A) oil and filter change - 400 hrs
Oil	177 lts		Type (B) Type (A) service plus injector
Coolant	218 lts		and tappet inspection/change - 2,500 hrs
Fuel usage - 50 hz	261 lts/hour @ 100% duty	Fuel usage - 60 hz	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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