

DEPARTEMENT OUTILLAGE

GROUPE ELECTROGENE 110KVA DIESEL TRIPHASE
AVEC INVERSEUR AUTOMATIQUE

Cummins 6BT5.9-G2	Firman FG274C	Generator Model:	SDG110C
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50HZ	3-Phase	Power Factor Cosφ=0.8
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RATINGS	PRIME POWER (PRP)		STANDBY POWER(ESP)		
	SDG110C				
Voltage	kVA	kWe	kVA	kWe	Amps
380/220	100	80	110	88	167
Noise level @7m	78db				

DEFINITION OF RATINGS & REFERENCE CONDITIONS

Standby Power ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. No overload capability for this rating. Ratings are in accordance with ISO 8528, ISO 3046 and BS 5514. Average load factor: ≤ 80%. Operating hours/year: max. 500.

Prime Power ratings apply to installations where utility power is unavailable or unreliable. At varying loads, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO 8528, ISO 3046 and BS 5514. Average load factor: ≤ 70%. Operating hours/year: unlimited.

Continuous Power ratings apply to installations where the generator set serves as utility. At constant load, the number of generator set operating hours is unlimited. No overload capability for this rating. Ratings are in accordance with ISO 8528, ISO 3046 and BS 5514. Average load factor: ≤ 100%. Operating hours/year: unlimited.

Firman generator sets are sized suitably for conditions of up to >25/≤40°C ambient temperature and >100m/≤1000m above sea level. Power ratings are subjected to changes should operating conditions vary.



Key Features:

- Efficient water cooled diesel engine.
- Radiator with pressure cap and drain point
- Fully guarded engine-driven fan
- Fully welded steel baseframe with lifting / jacking points
- Various fuel system options
- Heavy duty rubber anti-vibration mountings
- 24V starter batteries and connecting cables
- Separate engine-driven battery charging alternator
- Spin on oil and fuel filters and dry type air filter element
- Auto Start control with digital instrumentation
- Factory Test Certificate
- Operation & Maintenance Manual
- Wide range of optional extra features available

Overall Dimensions

Length (L2) = 2750mm
Width (W2) = 1100mm
Height (H2) = 1700mm
Weight=1700kg

SDG110C

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ENGINE&COOLING SYSTEM			Cummins 6BT5.9-G2	
General Data	Engine Speed		r/min	1500
	Gross Power		kWm	92
	Compression Ratio			17.3:1
	Cylinders/ Types			6 cyl/ In line
	Aspiration			Turbocharger and air charge cooled
	Cooling Mode			Closed Circulation Water Cooling
	Governor Type			Electronic
	Bore/ Stroke		mm	102/120
	Displacement		litres	5.9
	Lubrication System			Pressure Splashed
	Lube Oil Capacity (L)		litres	14
	Lube Oil type			Above CF grade or SAE10W-30,15W-40
	Fuel consumption	100% Load	L/hr	21.7
		75% Load	L/hr	16.3
		50% Load	L/hr	11.5
	Air Intake System			Turbocharged, Air/Air Cooling
	Intake Air Flow		L/sec	103
	Oil Consumption		g/kwh	<=4
	Exhaust Gas Flow		L/sec	271
	Exhaust Temperature		°C	510
	Max Back Pressure		kPa	10
	Max Intake Restriction		kPa	6
	Total Coolant Capacity-Engine only		litres	8.3
Thermostat		°C	82-95	
Max Water Temperature		°C	104	
Starting System		V	24V Electric	
Battery Capacity(V-Ah)		V	2x100AH	

ALTERNATOR			Firman	FG274C
General Data	Model (may vary with voltage)			FG274C
	Operating Temperature	°C		40
	Coupling / No. of Bearings			Direct / Single Bearing
	Phase / Poles			3-Phase / 4-Pole
	Winding Pitch			"Y" Type connecting
	Power Factor			Cos Φ = 0.8
	Excitation			Brushless
	Insulation System			Class H
	Telephone interference			THF < 2 %
	Total Harmonic Distortion (No Load)			<1.5%
	Voltage Regulation			±1%
	Protection Grade			IP23
	Alternator Efficiency at 0.8PF	100% Load		92.9%
		75% Load		93.4%
		50% Load		93.3%

*Specifications and designs are subjected to change without prior notice

DEEPSEA DSE7320 AUTO MAINS FAILURE CONTROLLER

The DSE7320 is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single, diesel or gas, gen-set applications. Monitoring an extensive number of engine parameters, the modules will display warnings, shutdown and engine status information on the back-lit LCD screen and illuminated LEDs. The modules include USB, RS232 and RS485 ports.

KEY FEATURES:

- kW & kVAr protection
- Reverse power (kW & kVAr) protection
- LED and LCD alarm indication
- Power monitoring (kWh, kVAr, kVAh, kVArh)
- Automatic load transfer (DSE7320)
- Engine exerciser
- Unbalanced load protection
- Independent earth fault trip
- Balancing timer (DSE7310 only)
- USB connectivity
- Backed up real time clock
- Configuration Suite PC software



DSE8610 SYNCHRONIZING CONTROLLER

The DSE8610 MKII is an easy to use Synchronising Auto Start Control Module suitable for use in a multi-generator loadshare system, designed to synchronise up to 32 generators including electronic and non-electronic engines. The DSE8610 MKII monitors the generator and indicates operational status and fault conditions, automatically starting or stopping the engine on load demand or fault condition.

KEY FEATURES:

- Sequential set start
- Manual voltage/frequency adjustment
- R.O.C.O.F. and vector shift protection
- Generator load demand
- Automatic hours run balancing
- Dead bus sensing
- Bus failure detection
- Direct governor and AVR control
- Volts and frequency matching
- kW and kvar load sharing
- Dead bus synchronising



GENERATING SET OPTIONS

Engine:



Alternator:



Controller:

