	<b>FICHA TECNICA</b>		<b>Mayo /2020</b>	
	<b>GENERADOR ELECTRICO</b> <b>500 KVA PRIME POWER / 550 KVA STANDBY POWER</b>		Revisión N° 01	N° Página 1 de 1

<b>Cummins</b> KTA19-G3A	<b>Firman</b> FG500K	Generator Model:	<b>SDG500CCS</b>
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50 HZ	3-Phase	Power Factor Cosφ=0.8
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RATINGS	PRIME POWER (PRP)		STANDBY POWER(ESP)		
	SDG500CCS				
Voltage	kVA	kWe	kVA	kWe	Amps
380/220	<b>500</b>	400	<b>550</b>	440	836
Noise level @7m	82db				


#### 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.

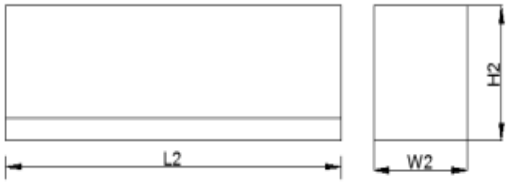
**Continuous Power ratings** apply to installations where the generator set serves as utility. At constant load, the number of generator set operating hours is unlimited. No overload capability for this rating. Ratings are in accordance with ISO 8528, ISO 3046 and BS 5514. Average load factor: ≤ 100%.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

**Power Partners 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



(2) Silent type

**Overall Dimensions**

Length (L2) = 5120mm  
Width (W2) = 1450mm  
Height (H2) = 2380mm  
Weight=5800kg



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**ENGINE&COOLING SYSTEM Cummins KTA19-G3A**

<b>General Data</b>	Engine Speed	r/min	1500	
	Compression Ratio		16:1	
	Cylinders/ Types		6 cyl/ In line	
	Aspiration		turbocharger and air charge cooled	
	Cooling Mode		Closed Circulation Water Cooling	
	Governor Type		Electronic	
	Bore/ Stroke	mm	159/159	
	Displacement	litres	19	
	Fuel consumption	100% Load	L/hr	110
		75% Load	L/hr	84
		50% Load	L/hr	58
	Air Intake System		Turbocharged, Air/Air Cooling	
	Max. Standby Power at Rated RPM	KW	504	
	Governor Type		Electronic	
	Intake Air Flow	L/s	579	
	Exhaust Gas Flow	L/s	1604	
	Exhaust Temperature	°C	557	
	Max Back Pressure	kPa	10	
	Max Intake Restriction	kPa	6,23	
	Total Oil Capacity	litres	50	
Oil Consumption	g/KW.h	<=4		
Coolant Capacity-Engine Only	litres	30,3		
Thermostat	°C	82-93		
Max Water Temperature	°C	104		
Starting System	V	24V Electric		
Battery Capacity(V-Ah)	V	2x200AH		

**ALTERNATOR Firman FG500K**

<b>General Data</b>	Model (may vary with voltage)		FG500K	
	Operating Temperature	°C	40	
	Coupling / No. of Bearings		Direct / Single Bearing	
	Phase / Poles		3-Phase / 4-Pole	
	Winding Pitch		Two Thirds	
	Power Factor		Cos $\Phi$ = 0.8	
	Excitation		Brushless	
	Insulation System		Class H	
	Telephone interference		THF < 2 %	
	Total Harmonic Distortion (No Load)		<1.5%	
	Voltage Regulation		±1% using MX341	
	Sustained short circuit		300% 10sec	
	Alternator Efficiency at 0.8PF	100% Load		92,9%
		75% Load		93,4%
50% Load			93,3%	



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#### DEESEA 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:

