

# 100 KVA GENSET

## Technical Data

Engine	Alternator	Generator Model
Cummins 4BTA3.9 - G13	STAMFORD Desing CEG224G	CEG - C110S

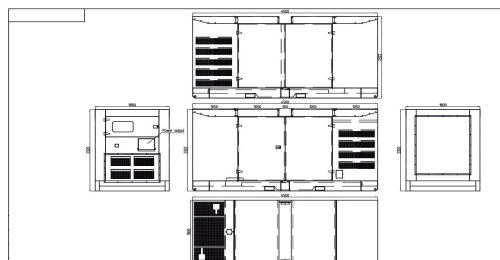
60 Hz/1800rpm	1 - Phase Factor Cos $\Phi = 1$ 3 - Phase Factor Cos $\Phi = 0.8$	Emissions N/A
---------------	--	------------------

RATINGS	Prime Power (PRP)		Standby Power (ESP)		Rated Current	Fuel Consumption @100% Load
	kWe	kVA	kWe	kVA	Amps (A)	
Voltage (V)						
208	80	100	88	110	277.6	212.0



### Key Features:

- Silent Diesel Genset, Based on **Cummins** engine, and STAMFORD design alternator.
- **Support both 3-phase 208V and 1- phase 120V** (can set 3 phase or 1 phase by customer) at 60HZ 1800RPM.
- **STAMFORD** design brushless alternator 12 wire 100% copper & 100% output.
- High Quality Canopy made of **Galvanized** painted steel and 304 Stainless hinges, door locks, screws, emergency stop cover.
- Built-in YUYE **ATS** (Automatic Transfer System).
- DEEPSEA 6120 Controller, SWG accumulator, MEBAY battery charger.
- Support Ambient temperature **50 degrees Celsius**. 8 hours base fuel tank, non-return fuel valve, water drain valve, fuel drain valve. Anti-Vibration mounting.
- Emergency shutdown for all failures (low oil, high water temp, over load).
- Warranty: 1 year from installation or **1200 hours** for motor and spare parts, 2 years or 1200 hours for alternator whichever comes first.



Overall Dimension & Weight		
	Open	Silent
Length (L)-mm:		2600
Width (W)-mm:		1100
Height (H)-mm:		1450
Dry Weight-kg:		1820

**Ratings:** All three phase generator sets are rated at 0.8 power factor. All single-phase generator sets are rated at 1.0 power factor.

**Prime Power:** Available continuously at variable load in lieu of commercially purchased power for an unlimited number of hours per year accordance with ISO8528-1, and an overload of 10% permitted for one hour in every twelve hours of operation in accordance with ISO 3046-1.

**Standby Power:** Emergency Standby Power in variable load applications in accordance with ISO8528-1 in the event of a utility power failure.

No overload available for this service as relevant alternators are peak continuous rated at 27 °C .

COMCAST ENERGY GROUP reserves the right to change the design or specifications without notice and without any obligation or liability.

**STAMFORD**  
power generation



<b>Basic Technical Data</b>		
Engine Model		4BTA3.9-G13
Compression Ratio:		18.0:1
Bore:	mm	102mm
Stroke:	mm	120mm
Governor Regulation:		≤5%
Aspiration:		Jacket water Aftercooled
Displacement:	L	3.9 L
No. of Cylinders:		4
Fuel System:		WF PW/Electronic Governor
Prime Power	kw	87
Standby Power	kw	97
<b>Performance Data</b>		
Governed Engine Speed	r/min	1800
100% prime power	g/kW·h	212
75% prime power	g/kW·h	208
50% prime power	g/kW·h	215
25% prime power	g/kW·h	246
<b>General Engine Data</b>		
Approximate Engine Weight (wet)	-kg	355
Mass Moment of Inertia of Rotating Components (No Flywheel)	-kg·m <sup>2</sup>	0.143
Center of Gravity from Rear Face of Block	mm	262
Center of Gravity above Crankshaft Centerline	mm	155
Engine Idle Speed	RPM	950-1050
Fire Order		1-3-4-2
<b>Engine Mounting</b>		
Maximum (Static) Bending Moment at Rear Face of Block	N.m	1356
<b>Exhaust System</b>		
Maximum Back Pressure	N.m	10
<b>Air Intake System</b>		
Maximum Intake Air Restriction with Heavy Duty Air Cleaner		
Dirty Element	kPa	6.2
Clean Element	kPa	3.7
<b>Lubrication System</b>		
Engine Oil Pressure for Engine Protection Devices:		
Idle Speed (Minimum )	kPa	207
Governed Speed (Maximum )	kPa	345
Maximum Oil Temperature	°C	121
Minimum Required Lube System Capacity - Sump plus Filters	litre	10.9
<b>Fuel System</b>		
Type Injection System		WF PW Direct Injection
WF PW Direct Injection	kPa	13.6
Maximum Fuel Inlet Temperature	°C	67.7
Total Drain Flow (constant for all loads)	litre/hr	30
<b>Cooling System</b>		
Coolant Capacity - Engine Only	litre	7.2
Maximum Coolant Friction Head External to Engine	kPa	35
Maximum Static Head of Coolant Above Engine Crank Centerline	m	18.3
Standard Thermostat (Modulating) Range	°C	83 - 95
Minimum Pressure Cap	kPa	48
Maximum Top Tank Temperature for Standby / Prime Power	°C	110 / 104
<b>Electrical System</b>		
Cranking Motor (Heavy Duty, Positive Engagement)	volt	24V
Battery Charging System, Negative Ground	ampere	40
Maximum Allowable Resistance of Cranking Circuit	ohm	0.002
Minimum Recommended Battery Capacity		
Cold Soak @ 0 to 32-F (-18 to 0-C)	0°F CCA	312
<b>Exhaust System</b>		
Intake Air Flow	litre/sec	79
Exhaust Gas Flow ...	litre/sec	142
Exhaust Gas Temperature	°C	380
<b>Alternator</b>		
60Hz/1800R.P.M		
<b>Units</b>		
Manufacture / Brand		COMCAST ENERGY GROUP
Model		CEG224G
Output.....Cont/40°C	KVA/KW	68/85
.....Standby/27°C	KVA/KW	75/94
Coupling / No. of Bearings		Direct / Single Bearing
Phase / Poles		3-Phase / 4-Pole
Power Factor		Cos Φ = 0.8
AVR Regulation		Yes
Voltage Regulation		± 0.5 %
Insulation Class		H
Drip Proof		IP23
Excitation		Brushless self-excitation
Altitude	m	≤1000
Overspeed	min -1	2250
<b>Other Part</b>		
Controller		DeepSeaDSE6120
Circuit Breaker		CHNT

For More Information  
Please visit our website [www.comcast-sa.com](http://www.comcast-sa.com) or contact your local sales representative.

### **México**

Overseas Sales Subsidiary  
Cal. Lázaro Cárdenas #1309  
Col. Colón industrial CP.44940  
Guadalajara, Jalisco  
Tel. +52 33 38607059  
**info.mx@comcast-sa.com**

### **Guatemala**

Overseas Sales Subsidiary  
Av. Hincapié 28-45 zona 13  
Guatemala city 01013  
Tel. +502 2309 7221  
**info.gua@comcast-sa.com**

### **Nicaragua**

Overseas Sales Subsidiary  
Km 9.5 carretera a masaya contigo  
al hotel plaza guanacaste  
Managua, Nicaragua  
Tel. +505 5764 9497  
**admin.nic@comcast-sa.com**

### **El Salvador**

Overseas Sales Subsidiary  
Calle El Bambú 8,  
Ayutuxtepeque  
San Salvador, El Salvador  
Tel. +503 7950 4882  
**info.sv@comcast-sa.com**

### **Dominican Republic**

Overseas Sales Subsidiary  
Av. Nuñez de Cáceres #2 Plaza  
Comercial Pradosur, Local 102  
Santo Domingo, Dominican Republic  
Te.+ 1 809 571 1033  
**info.dr@comcast-sa.com**