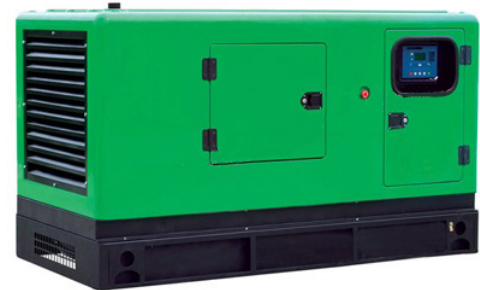


sMODEL	EC-30 60HZ
Standby Power (60Hz)	24KW /30KVA
Prime Power (60Hz)	22KW /27KVA

## Standard Features

### General Features:

- Engine (Cummins 4B3.9-G)
- Radiator 50°C max, fans are driven by belt, with safety guard
- 24V charge alternator
- Alternator (Stamford TWG Series, Siemens or Equal), single bearing alternator IP22/IP23, insulation class H/H
- Absorber
- Dry type air filter, double fuel filter, oil filter, coolant filter
- Main line circuit breaker
- Standard control panel
- 12V batteries, rack and cable
- Ripple flex exhaust pipe, exhaust siphone, flange, muffler
- Tools kits
- User manual



## Generator Ratings

Voltage	HZ	Phase	P.F (COS $\phi$ )	Standby Amps	Standby Ratings (KW/KVA)	Prime Ratings (KW/KVA)
480/277	60	3	0.8	36	24/30	22/28
460/266	60	3	0.8	37	24/30	22/28
440/254	60	3	0.8	39	24/30	22/28
416/240	60	3	0.8	41	24/30	22/28

Remarks: High Voltage of 6.3kv, 6.6kv, 10.5kv, 13.8kv etc are available.

**Prime Power (PRP):** Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820-97 (eqvISO8528); A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation.

**Standby Power Rating (ESP):** The standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload, utility parallel or negotiated outage operation capability is available at this rating.

## Sales Promises

Ettes Power provides a full line of brand new and high quality products. Each and every unit is strictly factory tested. Warranty is according to our standard conditions: 12 months or 1,500 running hours, subject to the earlier one. And what's more, Cummins gensets enjoy world-wide united Warranty from Cummins engine agency or service centre at the client's local side.

## ENGINE DATA

Manufacturer / Model:	Cummins 4B3.9-G, 4-Cycle
Air Intake System:	Air Natural Cooled
Fuel System:	A mode fuel pump
Cylinder Arrangement:	4 in Line
Displacement:	3.9 L
Bore and Stroke:	102x120 (mm)
Compression Ratio:	16.5:1
Rated RPM:	1800rpm
Max. Standby Power at Rated RPM:	30KW/40HP
Governor Type:	RSV Mechanical (Std)/Electronic (optional)
Frequency Regulation, Steady State:	≤1.5%

### Exhaust System

Exhaust Gas Flow:	4.7m <sup>3</sup> /min
Exhaust Temperature:	410°C
Max Back Pressure:	10kPa

### Air Intake System

Max Intake Restriction:	5kPa
Burning Capacity:	2.2m <sup>3</sup> /min
Air Flow:	150m <sup>3</sup> /min

### Fuel System

100%(Prime Power) Load:	228g/kw.h
75%(Prime Power) Load:	229g/kw.h
50%(Prime Power) Load:	240g/kw.h

### Oil System

Total Oil Capacity:	11L
Oil Consumption:	≤4g/kw.h
Engine Oil Tank Capacity:	9.5L
Oil Pressure at Rated RPM:	345kPa

### Cooling System

Total Coolant Capacity:	21L
Thermostat:	82-95°C
Max Water Temperature:	104 °C

## ALTERNATOR SPECIFICATION

### GENERAL DATA

Compliance with GB755, BS5000, VDE0530, NEMAMG1-22, IED34-1, CSA22.2 and AS1359 standards.

### Alternator Data

Manufacturer / Type:	Stamford TWG Series, Siemens or Equal
Number of Phase:	3
Connecting Type:	3 Phase and 4 Wires, "Y" type connecting
Number of Bearing:	1
Power Factor:	0.8
Protection Grade:	IP22/IP23
Altitude:	≤1000m
Exciter Type:	Brushless, self-exciting
Insulation Class, Temperature Rise:	H/H
Telephone Influence Factor (TIF):	< 50
THF:	< 2%
Voltage Regulation, Steady State:	≤±1%
Alternator Capacity:	30KVA
Alternator Efficiencies:	83.6%
Air Cooling Flow:	0.119m <sup>3</sup> /s

## GENERATING SET DATA

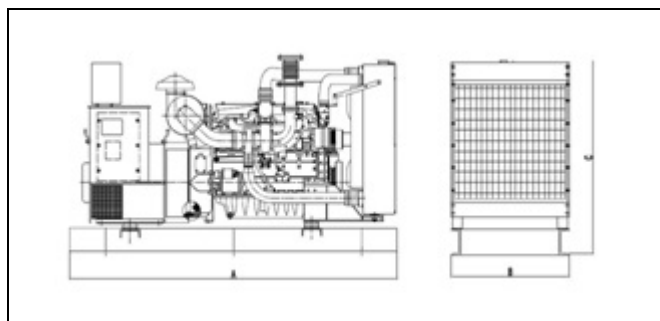
Voltage Regulation:	≥±5%
Voltage Regulation, Stead State:	≤±1%
Sudden Voltage Warp (100% Sudden Reduce):	≤+25%
Sudden Voltage Warp (Sudden Increase):	≤-20%
Voltage Stable Time (100% Sudden Reduce):	≤6S
Voltage Stable Time (Sudden Increase)	≤6S
Frequency Reduce:	≤5% Adjustable
Frequency Regulation, Stead State:	≤1.5%
Frequency Waving:	≤0.8%
Sudden Frequency Warp (100% Sudden Reduce):	≤+12%
Sudden Frequency Warp (Sudden Increase):	≤-10%
Frequency Recovery Time (100% Sudden Reduce):	≤5S
Frequency Recovery Time (Sudden Increase):	≤5S

## Options

Engine	Fuel System	Control System
<ul style="list-style-type: none"> <li>● Heater</li> </ul>	<ul style="list-style-type: none"> <li>● Daily Fuel Tank</li> <li>● Water Separator</li> </ul>	<ul style="list-style-type: none"> <li>● Remote Control Panel</li> <li>● Auto Transfer Switch (ATS) Control Panel</li> <li>● Paralleling System</li> <li>● Electricity Output Cabinet</li> </ul>

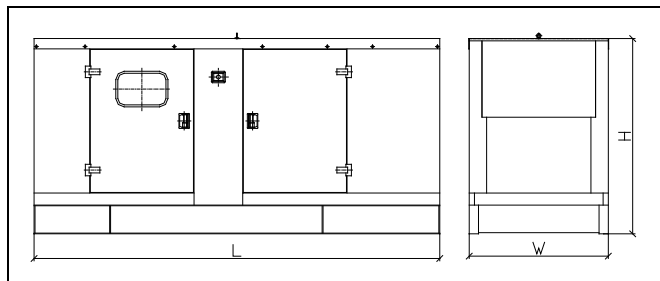
Alternator	Others	Data
<ul style="list-style-type: none"> <li>● Anti Condensation Heater</li> <li>● Permanent Magnet Generator (PMG)</li> <li>● Drop CT (For Paralleling)</li> </ul>	<ul style="list-style-type: none"> <li>● Rainproof Type</li> <li>● Soundproof Type</li> <li>● Trailer Type</li> </ul>	<ul style="list-style-type: none"> <li>● Engine Parts Drawing List</li> <li>● Spare Parts</li> </ul>

## Dimension & Weight



### Standard Configuration (Open Type)

Overall Size: 1800 (mm) x750 (mm) x1350 (mm)  
Weight: 876 kg



### Soundproof Type

Overall Size: 2230 (mm) x1060 (mm) x1680 (mm)  
Weight: 1300 kg

## Standard Control Panel/LCD



Ettes Power Standard Control Panel, usually adopts control module of UK Deepsea DSE6020 or Smargen 6110/6120 series, using micro processing techniques integrating digital, intelligent and network techniques which can carry out functions including auto start/stop, data measure, alarming. The controller uses LCD display, optional Chinese and English display interface with operation easy and reliable. It can be widely used in all types of generator automatic control system for compact structures, advanced circuits, simple connections and high reliability □

## Auto Module Control Panel/Automatic Transfer Switch



Auto Module Control Panel, usually adopt control module of UK Deepsea DSE 7320 or Equal, is the configuration for nobody on duty generators control, This kind of panel adopts auto module control system, with large LCD display to show the menu.

Features: receive remote output signal from ATS and realize auto start and stop of generators.

RS232 or 485 interface which can communicate with PC to realize remote operation.

Auto Mains Failure controller, can realize furthermore can detect ATS and control directly.

## Auto Synchronization Parallel Control Panel



Automatic Parallel Control Panel, usually adopting intelligent control module of UK Deepsea DSE 7510 or SDE8610 or Equal, This new automatic parallel system is inserted and folded installed, no need the peripheral relay and logic circuit. The main switch adopts electronic breaker or frame breaker, combined together with the generator, which is very reliable. One generator, one panel. The panel can be used both for single genset working or Gensets Parallel working. This kind of panel also can be used to parallel generator when the capability of the power plant needs to be enlarged in the future. □