

Technical specifications

Diesel Prime Gensets

QES 150 ST3

Voltage: 400/230 V

Frequency: 50HZ



Genset Image for illustration purposes only

TECHNICAL INFORMATION

Standby Power (ESP)	kVA	164
	kW	131
Prime Power (PRP)	kVA	150
	kW	120
Mechanical structure		Soundproofed
Engine		JOHN DEERE 6068HFG82_A
Alternator		MECC ALTE ECP34-2L/4A
Measures (L x W x H)	mm	3.270 x 1.170 x 1.860
Empty weight	kg	2.110
Fuel tank	L	375
Acoustic pressure, LpA	dB(A) a 7	67
Acoustic power LwA	dB(A)	93

Voltages	Prime Power (PRP)		Standby Power (ESP)	
	(kVA)	(kW)	(kVA)	(kW)
380/220	150	120	164	131
400/230	150	120	164	131
415/240	150	120	164	131

Notes:

PRIME POWER: Electrical power data available at a variable load without limits of hours per year. An overload of 10 % is allowed for 1 hour of every 12. In accordance with ISO 8528/1 (2005) – PRP

STANDBY POWER: Electrical power data at variable load in an emergency in accordance with standard ISO 8528/1 (2005) – ESP. Overloads of emergency power are not allowed.

The standard reference conditions are: 25 °C, 100 kPa and 30% relative humidity. Gasoil density: 0.85 g/cm3. Gasoline density: 0.68 g/cm3.

▪ INDEX

General description
Engine
Alternator
Electric Panel
Dimensions and Weight
Performance class
Regulation
Annex: Drawings

Grupos Electrógenos Europa, S.A. is a certified company with ISO 9001, ISO 14001, OHSAS 18001 and PECAL

We reserves the right to modify any characteristic of their equipment without prior warning.

Photographs representing the product range, while able to include options.

Weight and dimensions of a standard generator set.

Non-contractual document

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GENERAL DESCRIPTION

Specifically developed for the construction and general rental industries, this mobile soundproof generator set is easy to use and straightforward to maintain. The available features & options are designed to fully meet the requirements of generalist construction & rental applications. The controller provides advanced engine monitoring and protection features. Performance and maintenance requirements can also be observed. It's the practical Predictable Power choice.

ENGINE

Engine brand	JOHN DEERE	Bore (mm)	106
Model	6068HFG82_A	Stroke (mm)	127
R.P.M.	1.500	Compression ratio	19:1
Net power (kWm)	134	Europe exhaust emission	Stage III A
Fuel	Diesel	EPA exhaust emission	EPA3
No. of cylinders	6 L	TA-Luft exhaust emission	----
Engine Capacity (c.c.)	6.800		

Cooling System

Cooling type	Water	Limit ambient temperature (°C)	54
Coolant capacity (l)	11,9		

Lubrication System

Maximum oil consumption (% fuel consumption)	1		
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Air intake system

Intake air flow (m³/min)	10		
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Exhaust System

The exhaust system consists of aluminized pipes, stainless steel flexible pipes, interior and exterior aluminized steel exhaust silencer that is highly resistant to corrosion and rain cap. Hot part protections are also included.

T^a gas emission (°C)	545	Number of exhaust	1
Gas flow (m³/min)	26		

Start system

Starter voltage system (V)	12	Battery type	1 x 12V 148Ah 540A
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Fuel supply system

The fuel system consists of a fuel tank, feed pump, water separator fuel filter including 30 microns filtering element, injection pump and injection nozzles.

The fuel tank is made from plastic to prevent rust and includes a filling connection to the canopy outdoor filling connection, a cleaning hatch and draining plug for easier maintenance. The fuel level is controlled thanks to a fuel level sensor with an analogue gauge mounted in the control cubicle.

Fuel tank capacity (L)	375		
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Fuel consumption panel (range according to the standard configuration)

Load	Prime Power (PRP)		Standby Power (ESP)	
	(l/h)	Range (h)	(l/h)	Range (h)
25%	10,9	34	11,8	32
50%	19,8	18,9	21	17,6
75%	27	13,7	29	12,9
100%	34	10,9	37	10,2

ALTERNATOR

Mecc Alte alternator with 4 poles, with a lifetime lasting greased bearing, H class insulation, without brushes, 2/3 coil and AVR (Automatic Voltage Regulator)

Protection of all the windings by means of 2-part high quality polyester resin impregnation. The stator windings receive a double impregnation. Final finish with a coat of EG43 varnish.

Excitation system with MAUX auxiliary winding with overload capacity 3 times the nominal current for 20 s.

Joining of engine and alternator through flexible disc coupling.

Regulations:

- CEI 2-3
- IEC 34-1
- EN 60034-1
- VDE 0530
- BS 4999-5000
- CAN/CSA-C22.2 No14-68-No100-95
- ISO 8528:3

Low wave distribution:

- THC < 4%
- THD < 4%
- THF (IEC) < 2%
- TIF (NEMA) < 40

Incorporates electromagnetic emissions suppressor in accordance with standard VDE 0875, class K.

Brand	MECC ALTE	Voltage Stability	±1%
Model	ECP34-2L/4A	Performance at 75% p.f. 0.8 (%)	94
Alternator Power (kVA)	150 / Continuous (H)	Performance at 100% p.f. 0.8 (%)	93
Number of wires	12	Direct subtransient reactance X''d (%)	6,2
IP Alternator	IP 23	Subtransient time constant, T''d (ms)	9,5
Excitation system	MAUX	Zero sequence reactance, Xo (%)	2,5
AVR model	DSR	Short-circuit ratio, Kcc	0,5

▪ ELECTRIC PANEL

Easily accessed control cubicle integrated in the generator set with backlit fuel gauge, voltmeter, ammeter and Qc1011 controller providing advanced engine monitoring and protection features. Performance and maintenance requirements can also be observed. Mains elements are protected thanks to modular circuit breakers.

Circuit Breaker rated current (A)	CVS250B TM250G 4P3R 25kA
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A sockets panel integrated in the generator set is available as an option. The low power sockets have an independent thermal-magnetic protection.

1 x 16A SCHUKO IP44	1 x 32A CEE 3P+N+G IP67
1 x 16A CEE 3P+N+G IP44	1 x 16A CEE 3P+N+G IP67
1 x 63A CEE 3P+N+G IP67	

■ DIMENSIONS AND WEIGHT

Lenght, L (mm)	3.270
Width, A (mm)	1.170
Height, H (mm)	1.860
Weight (kg)	2.110

■ PERFORMANCE CLASS

Performance class	G3
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■ REGULATION

The generator set has a CE Marking that includes the following directives:

- 2006/42/EC Machine Safety.
- 2006/95/EC Low Voltage.
- 2004/108/EC Electromagnetic compatibility.
- 97/68/EC Gases and contaminating particles emissions.
- 2005/88/EC Noise emissions of machines outdoors in soundproof generator sets.

Applicable international regulations:

- ISO 8528
- ISO 3046
- BS 5000
- IEC 60034

