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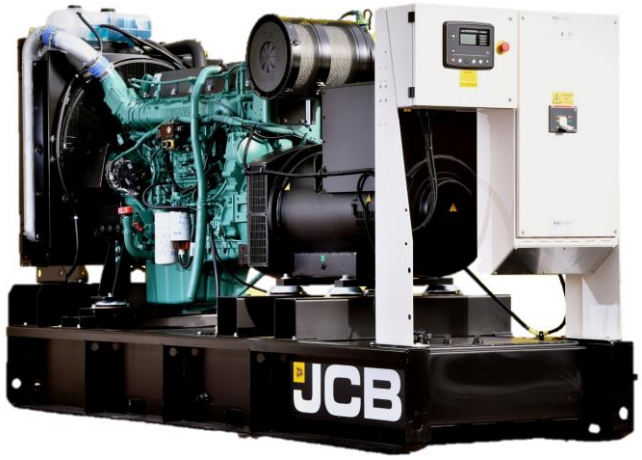

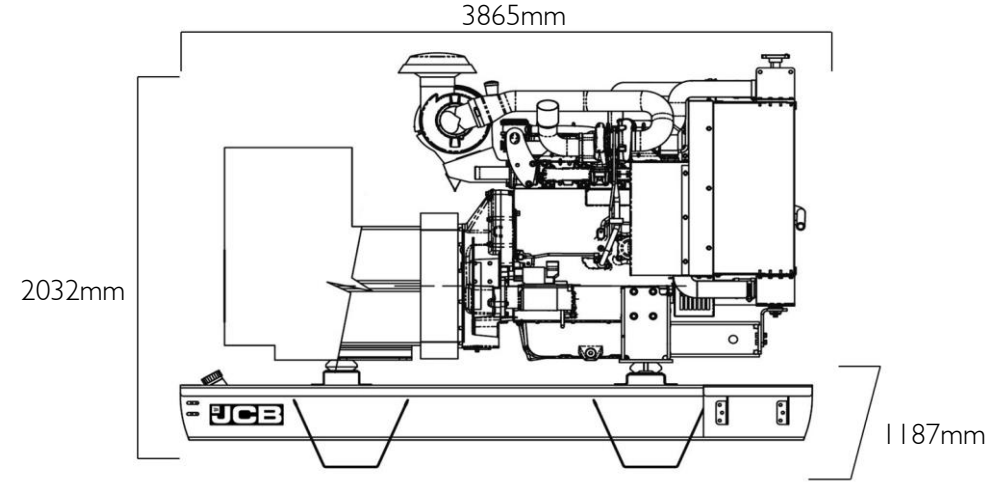

DIESEL GENERATOR

ELECTRICAL

			Prime		Standby				
Frequency (Hz)	Phases	Voltage (V)	kVA	kW	kVA	kW	Power Factor	Rated Speed (RPM)	Alternator
50	3	400/230V	500	400	550	440	0.8	1500	ECO40 3S4B
60	3	480/277V	563	450	625	500	0.8	1800	ECO40 3S4B
60	3	220/127V	563	450	625	500	0.8	1800	ECO40-1L/4B
60	3	208/120V	563	450	625	500	0.8	1800	ECO40-1L/4B

ALL RATINGS ARE TO STANDARD REFERENCE CONDITIONS

PRIME POWER: This rating is for the supply of continuous electrical power at variable load with 70% load factor in lieu of commercially purchased power. There is no limitation on the annual hours of operation and 10% over load power can be supplied for 1 hour in 12.

STANDBY POWER: This rating is for the supply of continuous electrical power, at variable load, in the event of a utility power failure. No overload is permitted. The average power output during a 24h period shall not exceed 80%. Operating hours are limited to 500h per annum with continuous operation to not exceed 300 hours

G550S | Open Set

ENGINE

1500 RPM		
Output Rating (PRP)	kW	432
Output Rating (Standby)	kW	475
1800 RPM		
Output Rating (PRP)	kW	489
Output Rating (Standby)	kW	550
Manufacturer and Model		Volvo TAD1641GE
Fuel		Diesel
Injection		Direct
Aspiration		Turbo Charged
Cylinders		6
Bore and Stroke	mm	144x 165
Displacement	L	16.12
Cooling		Water
Engine Oil Specification		API CH4 15W 40
Compression Ratio		17.0 : 1
Engine Oil Capacity	L	48.0
Coolant Capacity	L	60.0
Governor		Electronic
Air Filter		2 Stage
Lube Oil Consumption @ 100%	L/hr	0.10

FUEL CONSUMPTION

100% Load Prime	L/h	50Hz	101.7
75% Load Prime	L/h		77.2
50% Load Prime	L/h		52.2
100% Load Standby	L/h		110.5
100% Load Prime	L/h	60Hz	118.7
75% Load Prime	L/h		88.2
50% Load Prime	L/h		60.3
100% Load Standby	L/h		131.4

AIR SYSTEM

Combustion Air Flow 100% Standby	m^3/h	50Hz	2280
Radiator Cooling Air Flow 100% Standby	m^3/s		7.46
Alternator Fan Airflow	m^3/s		0.90
Radiator Duct Allowance	mmwg		28
Max Air On Temperature	°C		50
Combustion Air Flow 100% Standby	m^3/h	60Hz	2748
Radiator Cooling Air Flow 100% Standby	m^3/s		10.28
Alternator Fan Airflow	m^3/s		1.08
Radiator Duct Allowance	mmwg		28
Max Air On Temperature	°C		28

EXHAUST SYSTEM

Maximum Temperature 100% Standby	°C	50Hz	455
Exhaust Gas Flow 100% Standby	m^3/m		92.0
Maximum Allowed Back Pressure	mbar		100
Maximum Temperature 100% Standby	°C	60Hz	469
Exhaust Gas Flow 100% Standby	m^3/m		110.4
Maximum Allowed Back Pressure	mbar		100

FUEL SYSTEM

	Material	Capacity (L)
Standard Tank	Steel	744
Extended Tank (12hr)	Steel	1285
Extended Tank (24hr)	Steel	2565
Diesel Specification		EN590

SOUND PRESSURE

LpA (1m) 100% Standby	dB(A)	50Hz	106.2
LpA (1m) 100% Standby	dB(A)	60Hz	107.1

G550S | Open Set

ALTERNATOR

Poles	4
Winding Connections	Parallel Star*
Insulation	Class H
Enclosure	IP23
Exciter System	MAUX Excitation
Voltage Regulator	AVR - DER
Steady State Voltage Regulation	+/- 0.5%*
Bearing	Single bearing sealed
Coupling	Flexible disc
Cooling	Direct drive centrifugal blower fan
Coating	Winding Protection Grey

**Depending on voltage selection*

ELECTRICAL FEATURES

MAUX Excitation	●
PMG Excitation	Δ
Anti-Condensation Heater	Δ
Moulded Case Circuit Breaker (3 Pole)	●
Moulded Case Circuit Breaker (4 Pole)	Δ
Motorised Circuit Breaker	Δ
Earth Leakage Protection	Δ
Alternate Voltages	Δ
Emergency Stop Button	●
Static Battery Charger	Δ
Battery Isolator	Δ

Standard: ● Not Available: x Optional: Δ

MECHANICAL FEATURES

Electronic Governor	●
Coolant Level Sender	●
Radiator Guards	●
Hot Component Guards	Δ
Manual Oil Drain Pump	Δ
Water Jacket Heater	Δ
Pre-Filter with Separator	●
Fuel Level Sender	●
3 Way Fuel Valve and Coupling Nest	Δ
Bunded Base Tank	●
Exhaust Bellows	Δ
Industrial Silencer	Δ
Residential Silencer	x
Fork Pockets	●

Standard: ● Not Available: x Optional: Δ

STARTING SYSTEM

Starting Battery		Δ
Battery Type		Lead Acid
Battery Capacity	Ah	125
Number of Batteries		2
Auxiliary Voltage	V	24
Starter Motor	kW	7.0

Standard: ● Not Available: x Optional: Δ

G550S | Open Set

JCB COMMUNICATION AND CONTROL

DSE 7310 – Auto Start	●
DSE 7320 – Auto Start with Mains Sensing	x
DSE 8610 – Set to Set Synchronisation	Δ
DSE 8620 – Set to Mains Synchronisation	Δ
JCB LiveLink	Δ
RS232 Connection	●
RS485 Connection	●
Bund Leak Alarm	Δ
High Engine Temperature Shutdown	●
Low Oil Pressure Shutdown	●
Common Alarm Volt Free Contact	Δ
Generator Running Volt Free Contact	Δ

Standard: ● Not Available: x Optional: Δ

WEIGHT AND DIMENSIONS

Length	mm	3865
Width	mm	1187
Height	mm	2032
Shipping Volume (sea ready)	m^3	9.32
Weight*	Kg	4080

**Standard build with all fluids except fuel*

REFERENCE STANDARDS

JCB Generators are CE certified and conform to the following Directives (subject to a country requiring such standard):

- EN 12100, EN13857, EN60204
- 2006/42/CE Machinery safety
- 2006/95/EC Low voltage
- 2004/108/CE Electromagnetic compatibility
- 2000/14/EC Sound Power Level (amended by 2005/88/EC)
- 97/68/EC Emissions(amended by 2002/88/EC & 2004/26/EC)
- Power according to ISO 8528 and ISO 3046
- Ambient reference conditions 1000mbar, 25°C, 30% relative humidity ISO3046
- Based on diesel fuel with a specific gravity of 0.85 and conforming to BSEN590

Information based on standard specification equipment unless otherwise stated.