



DIESEL GENERATOR

FUEL OPTIMISED

ELECTRICAL

Frequency (Hz)	Phases	Voltage (V)	Prime		Standby		MCB Rating (A)	Minimum ATP Rating (A)	Rated Speed (RPM)
			kVA	kW	kVA	kW			
50	3	400/230V	105.0	84.0	115.5	92.4	160	160	1500
60	3	380/220V	105.0	84.0	115.5	92.4	160	160	1800
60	3	220/127V	107.9	86.3	118.7	95.0	320	320	1800
60	3	208/120V	107.9	86.3	118.7	95.0	320	320	1800

POWER FACTOR

3 Phase	0.8
1 Phase	1

MAXIMUM LOAD IMPACT*

kVA	63
kW	50.40

*With 20% voltage and 10% frequency deviation @ 50Hz, 400V

ALL RATINGS ARE TO STANDARD REFERENCE CONDITIONS ISO 8528

Prime: This rating is for the supply of continuous electrical power, at variable load, in lieu of commercially purchase 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: Standby Power (ESP) is the maximum output available, for up to 200 hours per year, where the average load (variable) does not exceed 70% of the standby power rating. No overload is available.

Stage IIIA Models are only emissions compliant at 50Hz Prime Power in accordance with 97-68EC.

CANOPY/SKID

Lockable Maintenance Access Doors	●
Control Panel Viewing Window	●
Fork Pockets	Δ
Single Lift Point	Δ
Bunding	Δ
Open Frame	Δ
High Density Fire Retardant Foam	●
Yellow Paint	●
White Paint	Δ
Four Point Lift (non CE)	Δ
Standard: ● Not Available: x Optional: Δ	

ALTERNATOR ECP34-2S/4

Poles	4
Winding Connections	Star
Insulation	Class H
Enclosure	IP23
Exciter System	Self-regulating brushless
Voltage Regulator	AVR
Steady State Voltage Regulation	+/- 1.0%
Bearing	Single bearing sealed
Coupling	Flexible disc
Cooling	Direct drive centrifugal blower fan
Coating	Winding Protection Grey

STARTING SYSTEM

Starter Motor	kW	4.20
Battery Capacity	Ah	120
Number of Batteries		1
Auxiliary Voltage	V	12

ENGINE

1500 RPM		
Gross Engine Power (PRP)	kW	100.00
Gross Engine Power (Standby)	kW	110.00
1800 RPM		
Gross Engine Power (PRP)	kW	100.00
Gross Engine Power (Standby)	kW	110.00
Manufacturer and Model		JCB 444 G-TCA- 100
Fuel		Diesel
Injection		Direct
Aspiration		Turbo Charged
Cylinders		4
Bore and Stroke	mm	103 x 132
Displacement	L	4.399
Cooling		Water
Engine Oil Specification		API CH4-SAE 10W40
Compression Ratio		17.5 : 1
Engine Oil Capacity	L	14.00
Coolant Capacity	L	18.00
Governor		Mechanical
Air Filter		Two stage filtration
Engine Oil Consumption	100% Load	0.1% of fuel consumed

FUEL SYSTEM

Diesel Specification		EN590
Standard Fuel Tank Capacity	L	270

FUEL CONSUMPTION

Load Condition	Unit	Frequency	Consumption
100% Load Prime	L/h	50Hz	24.1
75% Load Prime	L/h		18.60
50% Load Prime	L/h		13.00
100% Load Standby	L/h		26.30
100% Load Prime	L/h	60Hz	25.55
75% Load Prime	L/h		22.51
50% Load Prime	L/h		14.23
100% Load Standby	L/h		30.95

EXHAUST SYSTEM

Parameter	Unit	Frequency	Value
Maximum Temperature 100% Standby	°C	50Hz	529.00
Exhaust Gas Flow 100% Standby	m ³ /min		20.00
Maximum Allowed Back Pressure	mbar		100.00
Maximum Temperature 100% Standby	°C	60Hz	529
Exhaust Gas Flow 100% Standby	m ³ /min		23.00
Maximum Allowed Back Pressure	mbar		100.00
Exhaust Flange Size	mm	64.5	

AIR SYSTEM

Parameter	Unit	Frequency	Value
Intake Air Flow 100% Standby	Kg/h	50Hz	506.00
Total Cooling Air Flow 100% Standby (@ 16 mm H ₂ O Canopy Depression)	m ³ /s		3.9
Alternator Fan Airflow	m ³ /s		0.32
Intake Air Flow 100% Standby	Kg/h	60Hz	506.00
Total Cooling Air Flow 100% Standby (@ 16 mm H ₂ O Canopy Depression)	m ³ /s		3.96
Alternator Fan Airflow	m ³ /s		0.38

MECHANICAL FEATURES

Cooling Pack	●
Air Filter	●
Mechanical Governor	●
Low Oil Pressure Sender	●
Coolant Temperature Sender	Δ
Low Oil Pressure Sensor	Δ
Oil Temperature Sender	●
Radiator Guards	●
Hot Component Guards	Δ
Manual Oil Drain Pump (Canopy)	Δ
Water Jacket Heater	Δ
Pre-Filter with Separator	●
Mechanical Fuel Level Indicator (Non CE Only)	Δ
Internal Fuel Fill (Belly Tank)	●
3 Way Fuel Valve with Quick Connector	Δ
Residential Silencer	●
Industrial Silencer	x
Door Stops	Δ
Canopy Bump Stops	Δ
Bunded Base	Δ
Gravity Oil Drain Pipe	Δ
Larger Fuel Filler Neck	Δ
Electronic Governor	Δ (soon)

Standard: ● Not Available: x Optional: Δ

SOUND PRESSURE (CANOPY ONLY)

LpA (7m)	50Hz	dB(A)	70
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ELECTRICAL FEATURES

AVR DSR	●
AVR DER	x
Winding Protection Standard	x
Winding Protection Standard +	x
Winding Protection Grey	●
Winding Protection Total	x
Winding Protection Total +	x
MAUX	●
PMG	x
Anti-Condensation Heater	Δ
3 Pole Moulded Case Circuit Breaker	●
4 Pole Moulded Case Circuit Breaker	Δ
Earth Leakage Protection (Shunt Trip)	●
Preparation for Earth Connection	●
Optional Voltages	Δ
Synchronisation	Δ (soon)
Emergency Stop Button	●
External Emergency Stop Button	●
Fuel Level Sensor	●
1x63A 3 Phase / 3x32A 1 Phase Socket Box	Δ
1x63A 3 Phase / 3x32A 1 Phase / 2x16A 1Phase Socket Box	Δ
1x32A 3 Phase / 2x16A 1 Phase Socket Box	Δ
Standard: ● Not Available: x Optional: Δ	

BATTERY FEATURES

Battery Isolator	Δ
Battery Type	Sealed Lead Acid
Battery Size (Ah)	110
Number of Batteries	1
Battery Charger	Δ
Standard: ● Not Available: x Optional: Δ	

JCB COMMUNICATION AND CONTROL

DSE 4510	x
DSE 4520	●
DSE 7320	Δ
DSE 8610	Δ (soon)
Live Link For Power	●

OPTIONAL CE PACK

EMC Certification	●
Hot Guards	●
Belt Guards	●
Earth Leakage Relay	●
Sound Power Decal	●
EU Declaration for Engine Emissions	●
Complete Machine Declaration of Conformity	●
Standard: ● Not Available: x Optional: Δ	

WEIGHT AND DIMENSIONS

Length	mm	2850
Width	mm	1140
Height	mm	1850
Shipping Volume (sea ready)	m ³	5.95
Weight*	Kg	1830.00

*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

Information based on standard specification equipment unless otherwise stated.