



DIESEL GENERATOR

STAGE IIIA

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	18.1	14.5	19.9	16	25	25	1500
60	3	380/220V	20	16	22.1	17.7	32	30	1800
60	3	220/127V	20.3	16.1	22.3	17.8	63	60	1800

POWER FACTOR

3 Phase	0.8
1 Phase	1

MAXIMUM LOAD IMPACT*

kVA	18.1
kW	14.48

*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 ECP28-2L/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	2.00
Battery Capacity	Ah	110
Number of Batteries		1
Auxiliary Voltage	V	12

ENGINE

1500 RPM		
Output Rating (PRP)	kW	17.3
Output Rating (Standby)	kW	19
1800 RPM		
Output Rating (PRP)	kW	19.1
Output Rating (Standby)	kW	21
Manufacturer and Model		
		JCB by Kohler KDI 1903 M
Fuel		
		Diesel
Injection		
		Direct
Aspiration		
		Naturally Aspirated
Cylinders		
		3
Bore and Stroke		
	mm	88 x 102
Displacement		
	L	1.86 l
Cooling		
		Water
Engine Oil Specification		
		API CH4-SAE 10W40
Compression Ratio		
		11.5 : 1
Engine Oil Capacity		
	L	8.90
Coolant Capacity		
	L	6.80
Governor		
		Mechanical
Air Filter		
		Single paper element
Engine Oil Consumption		
	100% Load	0.1% of fuel consumed

FUEL SYSTEM

Diesel Specification		
		EN590
Standard Fuel Tank Capacity		
	L	53

FUEL CONSUMPTION

100% Load Prime	L/h	50Hz	4.45
75% Load Prime	L/h		3.29
50% Load Prime	L/h		2.24
100% Load Standby	L/h		4.93
100% Load Prime	L/h	60Hz	4.93
75% Load Prime	L/h		3.73
50% Load Prime	L/h		2.59
100% Load Standby	L/h		5.42

EXHAUST SYSTEM

Maximum Temperature 100% Standby	°C	50Hz	540.00
Exhaust Gas Flow 100% Standby	m ³ /min		2.01
Maximum Allowed Back Pressure	mbar		50.00
Maximum Temperature 100% Standby	°C	60Hz	550
Exhaust Gas Flow 100% Standby	m ³ /min		2.39
Maximum Allowed Back Pressure	mbar		85
Exhaust Flange Size	mm	45	

AIR SYSTEM

Intake Air Flow 100% Standby	Kg/h	50Hz	82.00
Total Cooling Air Flow 100% Standby (@ 15.3 mm H ₂ O Canopy Depression)	m ³ /s		0.47
Alternator Fan Airflow	m ³ /s		0.09
Intake Air Flow 100% Standby	Kg/h	60Hz	101
Total Cooling Air Flow 100% Standby (@ 24 mm H ₂ O Canopy Depression)	m ³ /s		0.57
Alternator Fan Airflow	m ³ /s		0.1

MECHANICAL FEATURES

Cooling Pack	●
Air Filter	●
Mechanical Governor	●
Low Oil Pressure Switch	●
Coolant Temperature Switch	Δ
Low Oil Pressure Sensor	Δ
Oil Temperature Switch	●
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)	x
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	x
Electronic Governor	x

Standard: ● Not Available: x Optional: Δ

SOUND PRESSURE (CANOPY ONLY)

LpA (7m)	50Hz	dB(A)	63
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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	x
Emergency Stop Button	●
External Emergency Stop Button	●
Fuel Level Sensor	●
1x63A 3 Phase 3x32A 1 Phase Socket Box	x
1x63A 3 Phase 3x32A 1 Phase 2x16A 1Phase Socket Box	x
1x32A 3 Phase 2x16A 1 Phase Socket Box	x
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	x
DSE 8610	x
Live Link for Power	Δ

WEIGHT AND DIMENSIONS

Length	mm	1750
Width	mm	790
Height	mm	1350
Shipping Volume (sea ready)	m ³	1.87
Weight*	Kg	800

*Standard build with all fluids except fuel

STANDARD 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	

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.