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DIESEL GENERATOR

STAGE V

ELECTRICAL

Frequency (Hz)	Phases	Voltage (V)	Prime		Standby		Rated Speed (RPM)
			kVA	kW	kVA	kW	
50	3	400/230V	18.1	14.5	19.9	16.0	1500
60	3	380/220V	20.0	16.0	22.1	17.7	1800
60	3	220/127V	20.3	16.1	22.3	17.8	1800
60	3	208/127	N/A	N/A	N/A	N/A	1800

POWER FACTOR

3 Phase	0.8
1 Phase	1

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.

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		85.00

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	101.00
Total Cooling Air Flow 100% Standby (@ 24 mm H ₂ O Canopy Depression)	m ³ /s		0.57
Alternator Fan Airflow	m ³ /s		0.10

ENGINE

1500 RPM		
Gross Engine Power (PRP)	kW	17.30
Gross Engine Power (Standby)	kW	19.00
1800 RPM		
Gross Engine Power (PRP)	kW	19.10
Gross Engine Power (Standby)	kW	21.00
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	
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ALTERNATOR ECP28-2L/4

Poles	4
Winding Connections	Star
Insulation	Class H
Enclosure	IP23
Exciter System	Self Exciting 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
Auxiliary Voltage	V	12

BATTERY FEATURES

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

MECHANICAL FEATURES

Cooling Pack	●
Air Filter	●
Mechanical Governor	●
Electronic Governor	x
Low Oil Pressure Switch	●
High Coolant Temperature Switch	●
Oil Temperature Sender	x
Radiator Guards	●
Hot Component Guards	Δ
Water Jacket Heater	Δ
Pre-Filter with Separator	●
Internal Fuel Fill	●
3 Way Fuel Valve with Quick Connector	Δ
Industrial Silencer	●
Bunded Base	Δ
Gravity Oil Drain Pipe	Δ
Larger Fuel Filler Neck	x
Fuel Level Sensor	●
Standard: ● Not Available: x Optional: Δ	

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	●
Standard: ● Not Available: x Optional: Δ	

JCB COMMUNICATION AND CONTROL	
DSE 4520	●
DSE 7310	x
DSE 8610	x
Live Link For Power	Δ
CE PACK (Optional)	
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.

