MFR GENERATOR HIRE – SPECIFICATION SHEET – G20QS

Image is for illustration purpose only

DIESEL GENERATOR	STAGE V

Electrical

			Prime		Standby		
Frequency (Hz)	Phases	Voltage (V)	kVA	kW	kVA	kW	Rated Speed (RPM)
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 MET 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.

MFR GENERATOR HIRE – SPECIFICATION SHEET 2 – G20QS

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_20 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_20 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	1.861
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

MFR GENERATOR HIRE – SPECIFICATION SHEET 3 – G20QS

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 System

Battery Isolator	Δ
Battery Type (Optional)	Lead Acid
Battery Size (Ah)	110
Number of Batteries	1

Mechanical System

Cooling Pack	•
Air Filter	•
Mechanical Governor	•
Low Oil Pressure Switch	•
High Coolant Temperature Switch	•
Radiator Guards	•
Pre-Filter with Separator	•
Internal Fuel Fill	•
Industrial Silencer	•
Fuel Level Sensor	•

MFR GENERATOR HIRE – SPECIFICATION SHEET 4 – G20QS

Electrical Features	
AVR DSR	•
Winding Protection Grey	•
MAUX	•
3 Pole Moulded Case Circuit Breaker	•
Earth Leakage Protection (Shunt Trip)	•
Preparation for Earth Connection	•
Emergency Stop Button	•

MFR Generator Hire Control	
DSE 4520	•
Live Link For Power	•

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	•

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.

MFR GENERATOR HIRE – SPECIFICATION SHEET 5 – G20QS

Weight and Dimensions – Generator Only!

Length	mm	1650
Width	mm	650
Height	mm	1200
Shipping Volume (sea ready)	m^3	1.29
Weight*	Kg	590

*Standard build with all fluids except fuel

Weight and Dimensions – Canopy Only!

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

Sound Pressure – Canopy Only!

LpA (7m)	50Hz	dB(A)	63

Fuel System

Diesel Specification		EN590
Fuel Tank Capacity - Open	L	80
Fuel Tank Capacity - Canopy	L	53

Canopy Features

Lockable Maintenance Access Doors	•
Control Panel Viewing Window	•
High Density Fire Retardant Foam	•
Yellow Paint	•
Residential Silencer	•
1x32A 3 Phase / 1x16A 1 Phase Socket Box	Δ