



2750mm

1760mm

DIESEL GENERATOR

FUEL OPTIMISED

ELECTRICAL

			Pri	me	Star	ndby			
Frequency (Hz)	Phases	Voltage (V)	kVA	kW	kVA	kW	MCB Rating (A)	Minimum ATP Rating (A)	Rated Speed (RPM)
50	3	400/230V	81.30	65.00	89.60	71.70	125.00	125.00	1500
60	3	380/220V	89.30	71.40	98.80	79.00	160.00	160.00	1800
60	3	220/I27V	89.30	71.40	98.80	79.00	250.00	250.00	1800
60	3	480/277V	89.30	71.40	98.80	79.00	160.00	160.00	1800

POWER FACTOR	
3 Phase	0.8
I Phase	1

MAXIMUM LOAD IMPACT*				
kVA	80.00			
kW	64.00			

^{*}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: 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.

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

JCB GENERATOR TECHNICAL SPECIFICATIONS.

G90S | Open Set



CANOPY/SKID	
Lockable Maintenance Access Doors	×
Control Panel Viewing Window	X
Fork Pockets	Δ
Single Lift Point	Δ
Bunding	Δ
Open Frame	X
High Density Fire Retardant Foam	X
Yellow Paint	X
White Paint	X
Standard: • Not Available: x Optional: Δ	7

ALTERNATOR HM250AI	
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					
Output Rating (PRP)	kW	81.00			
Output Rating (Standby)	kW	89.10			
	1800 R	PM			
Output Rating (PRP)	kW	90.00			
Output Rating (Standby)	kW	99.00			
Manufacturer and Model		JCB GTC-2			
Fuel		Diesel			
Injection		Direct			
Aspiration		Turbo Charged			
Cylinders		4			
Bore and Stroke	mm	103x 132			
Displacement	L	4.399			
Cooling		Water			
Engine Oil Specification		API CH4			
Compression Ratio		17.5 : 1			
Engine Oil Capacity	L	14.00			
Coolant Capacity	L	16.00			
Governor		Mechanical			
Air Filter		Single paper element			
Engine Oil Consumption	100% Load	0.1% of fuel consumed			
FUEL SYSTEM					

FUEL SYSTEM				
Diesel Specification		EN590		
Standard Fuel Tank Capacity	L	285		

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FUEL CONSUMPTION							
100% Load Prime		I	_/h			18.70	
75% Load Prime		I	_/h	50Hz		14.30	
50% Load Prime		I	_/h	SUHZ		10.20	
100% Load Standby		I	_/h			20.10	
100% Load Prime		l	_/h			23.40	
75% Load Prime	75% Load Prime			60Hz	701 I -	17.80	
50% Load Prime		l	_/h	6UH2		13.00	
100% Load Standby		l	_/h			25.20	
EXHAUST SYSTEM							
Maximum Temperature 100	0% Standby	(C			542.00	
Exhaust Gas Flow 100% Sta	andby	m ³	^{3/} min	50Hz		367.00	
Maximum Allowed Back Pre	essure	m	nbar			100.00	
Maximum Temperature 100% Standby			C			547.00	
Exhaust Gas Flow 100% Standby		m ³	^{3/} min	60Hz	•	487.00	
Maximum Allowed Back Pressure		m	nbar			100.00	
Exhaust Flange Size		r	nm		72.5		
AIR SYSTEM							
Intake Air Flow 100% Stand	lby	n	n³/h			367.00	
Total Cooling Air Flow 1009	% Standby	n	n ³ /s	50Hz		198.00	
Alternator Fan Airflow		n	n ³ /s			13.00	
Intake Air Flow 100% Standby		n	n³/h			463.00	
Total Cooling Air Flow 100% Standby			n ³ /s	60Hz		198.00	
Alternator Fan Airflow		n	n ³ /s			13.00	
SOUND PRESSURE (CA	SOUND PRESSURE (CANOPY ONLY)						
LpA (7m)	LpA (7m) 50Hz		d	IB(A)		N/A	
LpA (7m)	60Hz		d	IB(A)		N/A	

MECHANICAL FEATURES					
Cooling Pack			•		
Air Filter			•		
Mechanical Governor			•		
Low Oil Pressure Switch			•		
Coolant Temperature Sender			•		
Oil Temperature Sender			•		
Radiator Guards			•		
Hot Component Guards	Hot Component Guards				
Manual Oil Drain Pump (Canopy)		Δ			
Water Jacket Heater			Δ		
Pre-Filter with Separator			•		
Fuel Level Sender			•		
Internal Fuel Fill (Belly Tank)			•		
3 Way Fuel Valve			Δ		
Residential Silencer			•		
Industrial Silencer			X		
Standard: ●	Not Available: x	Optional: Δ			

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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	Δ
Winding Protection Total +	Δ
MAUX	•
PMG	Δ
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 Spike	•
Optional Voltages	Δ
Remote Screen	Δ
Emergency Stop Button	•
External Emergency Stop Button	•
Standard: • Not Available: x Optional: Δ	1

BATTERY FEATURES		
Battery Isolator		Δ
Battery Type	Lead Acid	
Battery Size (Ah)	120	
Number of Batteries	1	
Battery Charger		•
Standard: ●	Not Available: x	Optional: Δ

4520			Δ
Standard: ●	Not Available: x	Optional: Δ	
WEIGHT AND DIMENSIONS	3		
Length	mm	2	750
Width	mm	I	100
Height	mm	I	760
Shipping Volume (sea ready)	m ³	5	5.32
Weight*	Kg	15	90.00
*Standard build with all fluids except fuel			
OPTIONAL CE PACK			
OPTIONAL CE PACK EMC Certification			•
			•
EMC Certification			•
EMC Certification Hot Guards			•
EMC Certification Hot Guards Belt Guards			• • • •
EMC Certification Hot Guards Belt Guards Earth Leakage Relay	าร		• • • • • • ×
EMC Certification Hot Guards Belt Guards Earth Leakage Relay Sound Power Decal			• • • • • ×

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/I 08/CE Electromagnetic compatibility

JCB COMMUNICATION AND CONTROL

4510

- 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.