

JCB DIESEL GENERATOR TECHNICAL SPECIFICATIONS



G100QI

ELECTRICAL			
FREQUENCY	VOLTAGE	PRIME	STAND BY
50Hz	415 / 240V	100kVA / 80kW	110kVA / 88kW
Rated Speed	1500 rpm		
Circuit Breaker	3 pole protection		
Power Factor / Phase	0.8 / 3 phase		

All ratings to standard reference conditions ISO8528

ALTERNATOR	
Model	Mecc Alte ECP34-2S4C
Poles	4 pole
Winding Connections	Star
Insulation	Class H
Enclosure	IP23
Exciter System	Self-regulating brushless
Voltage Regulator	DSRL
Steady State Voltage Regulation	+/- 1.0%
Bearing	Single bearing sealed
Coupling	Flexible disc
Cooling	Direct drive centrifugal blower fan

MAXIMUM LOAD ACCEPTANCE IN A SINGLE STEP
68%

Prime: The maximum power which the generating set is capable of delivering continuously while supplying a variable electrical load. Average load should be 70% of prime power rating. There is no limitation on the annual hours of operation and 10% overload power can be supplied for 1 hour per 12 hrs.

Standby: The max power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 hrs of operation per year. Average load should be 70% of standby power rating. No overload is permitted.

ENGINE			
Make & Model			JCB 448TG-92
Output Rating		kW	92
Engine BHP			125
Fuel			Diesel
Injection			Direct
Aspiration			Turbo Charged after cooled
Cylinders			4
Displacement		liter	4.8
Cooling			Water
Engine Oil Specification			15W40 API CH4
Compression Ratio			17.2:1
Engine Oil Capacity		liter	14
Oil Consumption		% of fuel consumed	<0.1
Coolant capacity		liter	18
Governor			Mechanical
Air Filter			2 stage paper element
Fuel Consumption	50% Load	l/h	12.6
	75% Load	l/h	16.9
	100% Load	l/h	22.2

STARTING SYSTEM			
Starter Motor		kW	4.2
Battery Capacity		Ah	110
Auxiliary Voltage		V	12

EXHAUST SYSTEM			
Maximum Temperature 100% Standby		°C	548
Exhaust Gas Flow 100% Standby		kg/h	492
Maximum Allowed Back Pressure		mbar	100

AIR SYSTEM			
Maximum allowed air intake depression		mbar	80
Air flow at Standby rating		kg/h	470

FUEL SYSTEM			
Diesel Specification			HSD
Fuel Tank Capacity		liter	180
Base Frame Thickness		mm	2.5

WEIGHT AND DIMENSIONS		
Length	mm	2500
Width	mm	1230
Height	mm	1800
Dry Weight (Standard Build inclusive of coolant and oil)	kg	1550
Sound Level @ 1m	dB	Less than 75

CONTROL PANEL		
Body	mm	1.5 sheet Steel
Controller	Deepsea 4520	Liveline option enabled
MCCB	A	175

Display parameters	Audio-Visual warning	Shut-down with Audio-visual annunciation
Engine RPM	Low Oil pressure	Low Oil Pressure
Coolant temperature	High Coolant temp.	High coolant temp.
DG set hours run	Fail to start.	Low Fuel level
Fuel level Indication %	Low Battery Voltage	Engine Over speed
Battery Voltage	High Battery Voltage	Engine under speed
Gen. Volts (Phase- neutral & Phase- Phase)	Over Voltage	Over Current
Gen. Current (Amps.)	Under Voltage	Under voltage
Gen. Frequency (Hz.)	Low fuel level	Over voltage
Power factor	Fail to stop	Over frequency
KVA _r	Charging alt. Failure	Under frequency
kW		Water in Fuel
kVA		Emergency Stop
Charging Alternator Voltage		
Real time Clock		

- Ambient reference conditions 1000mbar, 25°C, 30% relative humidity ISO8528
- Power according to ISO3046
- Information based on standard specification equipment unless otherwise stated
- Conformance Standards IS 1460,ISO8528,ISO3046,IS13018
- Fuel Consumption data is based on Diesel having specific gravity of 0.85 & conforming to IS 1460 & fuel consumption tolerance is +5%
- Oil consumption data is based on oil with 0.89 Specific gravity.
