

JCB DIESEL GENERATOR TECHNICAL SPECIFICATIONS



G160QI

ELECTRICAL			
FREQUENCY	VOLTAGE	PRIME	STAND BY
50Hz	415 / 240V	160kVA / 128kW	176kVA / 140.8kW
Rated Speed	1500 rpm		
Circuit Breaker	4 pole protection		
Power Factor / Phase	0.8 / 3 phase		

All ratings to standard reference conditions ISO8528

ALTERNATOR	
Model	Mecc Alte ECP34-2L4C
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
60%

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			M&M 160kVA Mech CPCB II
Output Rating		kW	146.5
Engine BHP			199
Fuel			Diesel
Injection			Direct
Aspiration			Turbo Charged after cooled
Cylinders			6
Displacement		liter	7.12
Cooling			Water
Engine Oil Specification			15W40 API CI4+
Compression Ratio			16.8:1
Engine Oil Capacity		liter	19.8
Oil Consumption		% of fuel consumed	<0.1
Coolant capacity		liter	25
Governor			Mechanical
Air Filter			2 stage paper element
Fuel Consumption	50% Load	l/h	20.8
	75% Load	l/h	27.8
	100% Load	l/h	36.5

STARTING SYSTEM		
Starter Motor	kW	4.2
Battery Capacity	Ah	150
Auxiliary Voltage	V	24

EXHAUST SYSTEM		
Maximum Temperature 100% Standby	°C	600
Exhaust Gas Flow 100% Standby	kg/h	664
Maximum Allowed Back Pressure	mbar	100

AIR SYSTEM		
Maximum allowed air intake depression	mbar	60
Air flow at Standby rating	kg/h	637

FUEL SYSTEM		
Diesel Specification		HSD
Fuel Tank Capacity	liter	310
Base Frame Thickness	mm	2.5

WEIGHT AND DIMENSIONS		
Length	mm	3750
Width	mm	1300
Height	mm	1750
Dry Weight (Standard Build inclusive of coolant and oil)	kg	2300
Sound Level @ 1m	dB	Less than 75

CONTROL PANEL		
Body	mm	1.5 sheet Steel
Controller	Deepsea 4520	Liveline option enabled
MCCB	A	250

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
kVAr	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,IS 13018
- 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.
