

DIESEL GENERATOR 100 kVA, INDUSTRIAL

IDEAL USAGE

Projects that require efficient and reliable temporary power, including industrial locations.

APPLICATIONS

- Powering locations where permanent electricity supply is not available - such as temporary accommodation, construction or other remote sites
- Replacing utility power supply to industrial equipment - motors, pumps, conveyors and other equipment
- Additional power for seasonal increases in demand such as manufacturing, distribution and storage



ELECTRICAL

			Prime		Standby		
Frequency (Hz)	Phases	Voltage(V)	kVA	kW	kVA	kW	Rated Speed
50	3	400/230V	100	100	110	88	1500
60	3	480/277V	100	100	110	88	1800

POWER FACTOR

3 Phase	0.8
1 Phase	1

RATINGS

Prime: This rating is for the supply of continuous electrical power, at variable load, in lieu of commercially purchased power. There is no limitation on the hours of operation and 10% overload power can be supplied for 1 hour in 12.

Standby: Standby Power (ESP) is the maximum output available, for up to 500 hours per year, where the load does not exceed 70% of the standby power. Stage IIIA Transition & Stage V models are only emission compliant at 50 Hz Prime Power.

CANOPY

- Lockable Maintenance Access Doors
- Door Stays
- Forklift Protection Bumpers
- Control Panel Viewing Window
- Integral Fork Pockets
- Single Lift Point
- Bundling
- 4 Point Tie Down
- High Density Fire Retardant Foam
- White Paint (RAL 9010)
- Galvanised Steel Canopy

ALTERNATOR ECP34 - 254 A

Poles	4
Winding Connections	Star
Insulation	Class H
Encloser	IP23
Exciter System	Self Regulating brushless
Voltage Regulator	AVR
Steady State Voltage Regulator	+/- 1%
Bearing	Single bearing sealed
Coupling	Flexible doc
Cooling	Direct drive centrifugal fan

ENGINE

	1500 RPM	1800 RPM
New Output Rating (PRP)	88 kW	88 kW
Net Output Rating (Standby)	93 kW	93 kW
Manufacturer and Model	JCB 448 G - TCA 92	
Fuel	Diesel	
Injection	Direct	
Aspiration	Turbo Charged	
Cylinders	4	
Bore and Stroke	103 x 135 mm	
Displacement	4.77 L	
Cooling	Water	
Compression Ration	18 : 1	
Engine Oil Specification	API CH4 SAE 10W40	
Engine Oil Capacity	15.00 L	
Coolant Capacity	16.00 L	
Governor	Electronic	
Air Filter	Paper Element	
Engine Oil Consumption	100% 0.1% of fuel consumed	
	Load	
Exhaust Emission After Treatment	None	
Emission Standard	Stage IIIA Transition	

ELECTRICAL FEATURES

MAUX Excitation
 4 Pole Moulded Case Circuit Breaker
 Earth Leakage Protection
 Preparation for Earth Spike
 External Emergency Stop Button
 Bund Alarm / Shutdown
 50 Hz / 60 Hz Switch
 Socket Panel (1x63A-3ph 1x32A - 3ph, 3x 32A-ph)
 IP44 (1 x 125A - 3ph) IP67

MECHANICAL FEATURES

Cooling Pack
 Air Filter
 Electronic Governor
 Low Oil Pressure Switch
 Coolant Temperature Sender
 Oil Temperature Sender
 Water Jacket Heater
 Fuel Level Sender
 Spark Arrestor
 3 Way Fuel Valve
 Air Shut Off Valve
 Residual Silencer
 Racor Water/Fuel Separator

WEIGHT AND DIMENSIONS

Length	3334 mm
Width	1200 mm
Height	1912 mm
Shipping Volume (sea ready)	7.70 m ³
Weight*	2120 Kg

*Standard build with all fluids except fuel

TYPICAL SOUND PRESSURE

dBa @ 7 50 Hz 68 dBa

STARTING SYSTEM

Battery Capacity	120 Ah
Number of Batteries	1
Auxiliary Voltage	12 V

FUEL SYSTEM

Diesel Specification	EN590
Standard Capacity Fuel Tank	280 L

AIR SYSTEM

Intake Air Flow 100% Standby	50 Hz	402 m ³ /h
Radiator Cooling Airflow		3.3 m ³ /h

BATTERY FEATURES

Battery Isolator	
Battery Type	Sealed Lead Acid
Battery Charger	

EXHAUST SYSTEM

Maximum temperature	50 Hz	548 °C
Exhaust Gas Flow 100% Standby		18.86 m ³ /min
Maximum Allowed Back Pressure		10.00 kPa
Exhaust Discharge Size		100 mm

COMMUNICATION AND CONTROL

DSE 8610 synchronising controller
 LiveLink for Power
 Analogue Hour Meter

FUEL CONSUMPTION

100% Load Prime	50 Hz	23.50 L/h
75% Load Prime		17.80 L/h
50% Load Prime		12.50 L/h
100% Load Standby		26.50 L/h
100% Load Prime	60 Hz	24.40 L/h
75% Load Prime		18.86 L/h
50% Load Prime		12.90 L/h
100% Load Standby		26.50 L/h

CE PACK

EMC Certification
 Hot Guards
 Belt Guards
 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 standards)

- EN 12100, EN13857, EN60204
- 2006/42/ce Machine 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 100 mbar, 25, 30% relative humidity

Information based on standard specification equipment unless otherwise stated*

