

GREEN POWER PERKINS DIESEL ENGINE

1500 RPM	Type GP80P
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The Engine with integrated water cooling

Engine: 1104A-44TG2

Technical description

- Optimized cast iron cylinder block with optimum distribution of forces
- Piston cooling for low piston temperature and reduced ring temperature
- Powerful but 4.4 litre naturally aspirated 4 cylinder compact Engine
- Crankshaft hardened bearing surfaces and fillets for moderate on main and big end bearings
- Keystone top compression rings for long service life
- Replaceable valve guides and valve seats
- Thermostatically controlled system with gear driven circulation pump
- Lift eyelets
- High inertia flywheel to SAE J620
- Flywheel for flexible coupling and friction clutch
- Front engine mounting brackets

Benefits

- Low noise emission, cost savings as no noise attenuation measures are required
- Long service intervals: 1000 hour oil change intervals and low fuel consumption bring savings in Operating costs
- Low installation costs
- Excellent load takeover characteristics ensure prompt power supply
- Combined oil cooling and lubrication prevents corrosion and cavitation
- High reliability and durability together with reduced maintenance requirement and wear parts

Fuel System

- Mechanically governed cassette type fuel injection pump
- Split element fuel filter

Oil System

- Spin-on full flow lub oil filter
- Wet steel sump with filler and dipstick

Control Panel

Manual or Automatic start control panel

- 12 volt Electronic shut Off Solenoid(ESOS) energised to run
- 12 volt starter motor and 12 volt 15 amp alternator with DC output
- Glow plug cold start aid and heater/starter switch
- Oil pressure and coolant temperature switches

Rating Table : The Genset 1104A-44TG2 Engine.

Engine type	1104A-44TG2	
Speed	min ⁻¹ rpm	1500
Frequency	Hz	50
Engine Power		
Prime power (PRP)	kVA kW	80 64
Limited time running power (LTP)	kVA kW	88 70.5
Fuel consumption		
Standby power	l/hr	20.5
Prime power	l/hr	18.7
75 % of prime power	l/hr	14.0
50 % of prime power	l/hr	9.7

PRP* kVA/KW :

Prime power is available for an unlimited number of annual hours in variable load application. A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation.

LTP** kVA/KW :

The standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload, utility parallel or negotiated outage operation capability is available at this rating.

Scope of supply :

The engine and alternator are mounted together forming a rigid monoblock, the shoulders are connected by inflexible disc connection. The mono-block is mounted on a steel base frame through silent blocks. The base frame is including a fuel tank. Starting is electric and it contains a battery. The generator monitoring system consists of a control module.

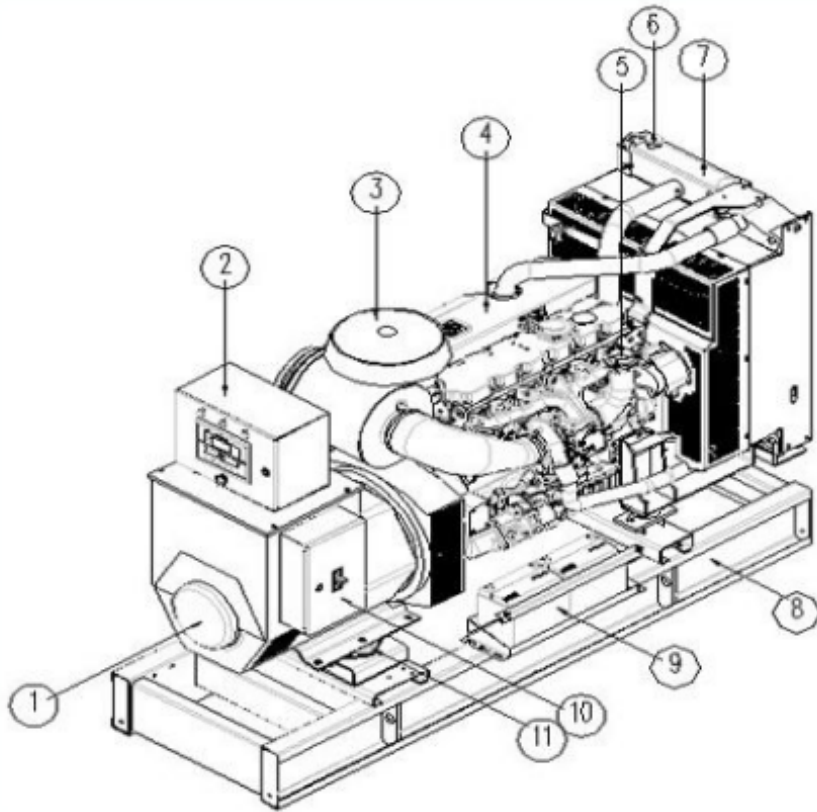
Technical Data

Engine type	1104A-44TG2		
Numer of cylinder	4		
Bore x Stroke	mm	105 x 127	
Displacement	l	4.4	
Compression ratio	17.25:1		
Engine Power PRP	KW	64	
Engine Power LTP	KW	70.5	
Cooling Type	water		
Injection Type	Indirect		
Dry weight	Kg	556	
Air Intake	m ³ /min	5.14	
Max standby power at rated RPM	KW/HP	80.7/108.2	
Coolant capacity	Litres	13.0	
Battery	Ah	125	
Oil Tank capacity	Litres	8.4	
Exhaust gas flow	m ³ /min	13.3	
Exhaust gas Temperature	°C	550	

Dimensions

Engine type	Length	Width	Height
1104A-44TG2 mm	1241	629	951

Engine Illustration



- 1. Alternator
- 2. Control cabinet
- 3. Air filter
- 4. Engine
- 5. Mounting flange of vent-pipe
- 6. Water inlet
- 7. Radiator

- 8. Base frame
- 9. Battery
- 10. Switch cabinet
- 11. Vibration isolator
- 12. Lifting lug
- 13. Fuel level meter
- 14. Fuel inlet

