

1000 Series Diesel engine

1006TG2A

100.0 kWm 1500 rev/min
118.0 kWm 1800 rev/min

Motorsazan TG2A engine, the family of Perkins 1000 series, is renowned throughout the power, quality, high durability, low fuel consumption and reduced maintenance costs.

The advantages:

- Rated speed is changeable between 1500 rpm and 1800 rpm allowing standard builds to operate at either 50 Hz or 60 Hz.
- Sophisticated and advanced Injection pump (Delphi DPG) equipped with accurate mechanical governor, electrical shut down which is of high importance in emergency and automatic start.
- Gear driven water pump and pusher fan maximize output of the cooling system and guarantee the engine performance at 53^oc ambient temperature (and 46^oc when cabin is installed).
- spread and reliable after sale services throughout the country.



Performance

Engine Speed (rev/min)	Type of Operation	Typical Generator Output (net)		Engine Power			
				Gross		Net	
		kVA	kWe	kWm	bhp	kWm	bhp
1500	Prime Power	102.5	82.0	95.5	128.0	91.0	122.0
	Standby power	112.5	90.0	105.0	141.0	100.0	134.0
1800	Prime Power	120.5	96.5	113.5	152.5	107.0	143.5
	Standby power	132.5	106.0	125.0	167.5	118.0	158.0

All ratings based on operation under ISO 3046 condition using typical fan sizes and drive ratios. For operation outside of these conditions please consult with Motorsazan company. Performance tolerance quoted by Motorsazan is $\pm 5\%$. Electrical ratings assume a power factor of 0.8 and a generator efficiency of 90%.

Fuel specification: BS2869 Part 2 1998 Class A2 or ASTM D975 D2.

Rating Definitions:

Prime power: Power available at variable load in lieu of main power network. An overload of 10% is permitted for one hour in every twelve hours of operation.

Standby power: power available at variable load in the event of a main power network failure. No overload is permitted.

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standard specification

Air filter:

Mounted air filter and turbo charger

Fuel system:

Rotary fuel injection pump
Mechanical governing conforms to ISO 8528-5: 1993 (E)
Class G2, ISO3046-4M3
Spin-on full-flow fuel oil and pre-filler
Cold start aid

Lubrication system:

Flat bottomed aluminium sump
Spin-on full-flow oil filters
Oil cooler

Cooling system:

Thermostat controlled cooling system with gear driven water pump
Fan drive and 22" pusher fan
Radiator (and piping) with fan guards

Electrical System:

12 volt starter motor and 55 Amp alternator
Oil pressure switch and coolant temperature switch

Flywheel and Housing:

Cast iron SAE 3 flywheel housing
Flywheel to SAE J620 size 10/11

Mountings:

Front engine mountings

Optional equipment:

24 Volt alternator
24 Volt starter motor
Water temperature gauge and sender
Heater / starter switch
Rear engine mountings
Workshop manual
Parts book
User hand book
Electronic governor (12V only)

Fuel consumption litres/hour		
Power rating	1500 rev/min	1800 rev/min
Standby power	21.7	31.7
Prime power	24.3	28.9
75% of prime power	17.9	21.7
50% of prime power	12.3	15.4

Basic technical data

Number of cylinders: 6

Cylinder arrangement: Vertical, in-line

Cycle: 4 stroke

Induction system: Turbocharged

Combustion system: Direct injection

Cooling system: Water cooled

Displacement: 5.99 litres

Bore: 100 mm

Stroke: 127 mm

Compression ratio: 16.0:1

Direction of rotation: Clockwise viewed from front

Firing order: 1,5,3,6,2,4

Total lubrication system capacity: 16.1 litres

Coolant capacity (inc radiator): 27.7 liters

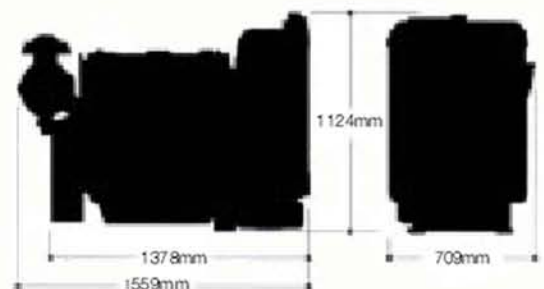
Engine total weight (dry): 586 kg

Engine total weight (wet): 623 kg

Length: 1559 mm

Width: 709 mm

Height: 1124 mm



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Motorsazan reserves the right to modify product specification.