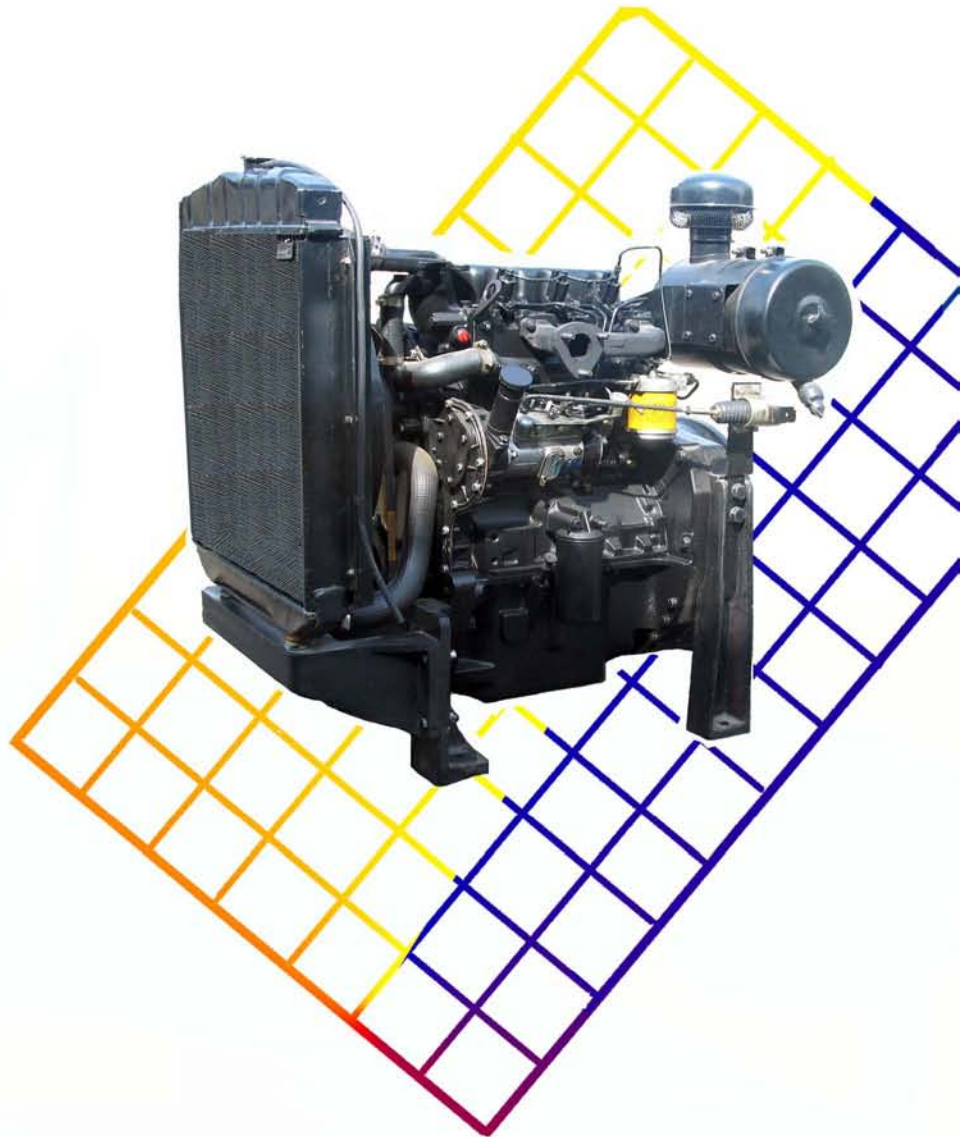




MOTORSAZAN

3.152G GENSET POWER



Performance

Engine speed rev/min	Type of operation	Typical generator output(net) kVA	Engine Power	
			kW	bhp
1500	Prime power	23.4	20.8	27.9
	Standby power	25.7	22.9	30.7



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.

Standard specifications

Air filter:

Mounted air filter

Fuel system:

Rotary fuel injection pump
Mechanical governing
Single cartridge fuel filter and prefilter

Lubrication system:

Gray cast iron oil-sump with filler and dipstick
Spin-on full-flow oil filter

Cooling system:

Belt driven circulating pump
17" belt driven fan
Mounted radiator and pipework

Electrical equipment:

12 volt starter motor
12 volt 55 Amp alternator with DC output
Switch for oil pressure
12 volt shut down solenoid energized to run
Cold start aid

Flywheel and Housing:

High inertia flywheel to SAE J620 size 10/11 $\frac{1}{2}$
Cast iron SAE3 flywheel housing

Mountings:

Front mounting brackets

Optional equipment:

Coolant temperature gauge
Lubrication oil pressure gauge and sender
Heater/Starter switch
Flywheel and coupling suitable for double bearing alternators.
Rear mounting brackets

Fuel consumption litres / hour	
Power rating	1500 rev/min
Standby power	7.3
Prime power	4.9
75% of prime power	3.8
50% of prime power	2.8
25% of prime power	1.9

Basic technical data

Number of cylinder: 3

Cylinder arrangement: Vertical, in line

Cycle: 4 stroke

Induction system: naturally aspirated

Cubic capacity: 2.5 litres (152.7 cu-in)

Bore: 91.4 mm(3.6 in)

Stroke: 127 mm (5 in)

Compression ratio: 18.5:1

Direction of rotation: Clockwise viewed from front

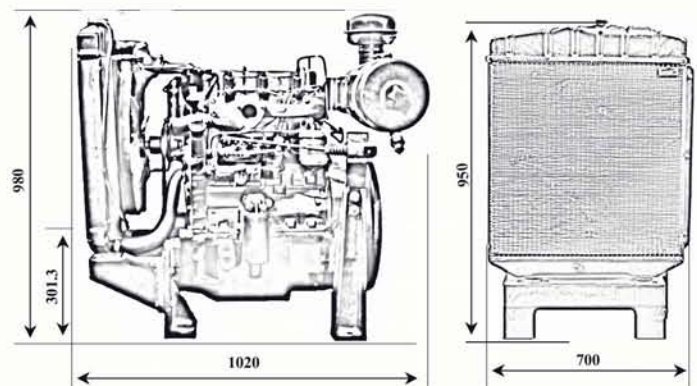
Firing order: 1,3,2

Total lubrication system capacity: 6 litres

Coolant capacity (including radiator): 11 liters

Engine total weight (dry): 344 kg

Engine total weight (wet): 361 kg



All dimensions are in mm

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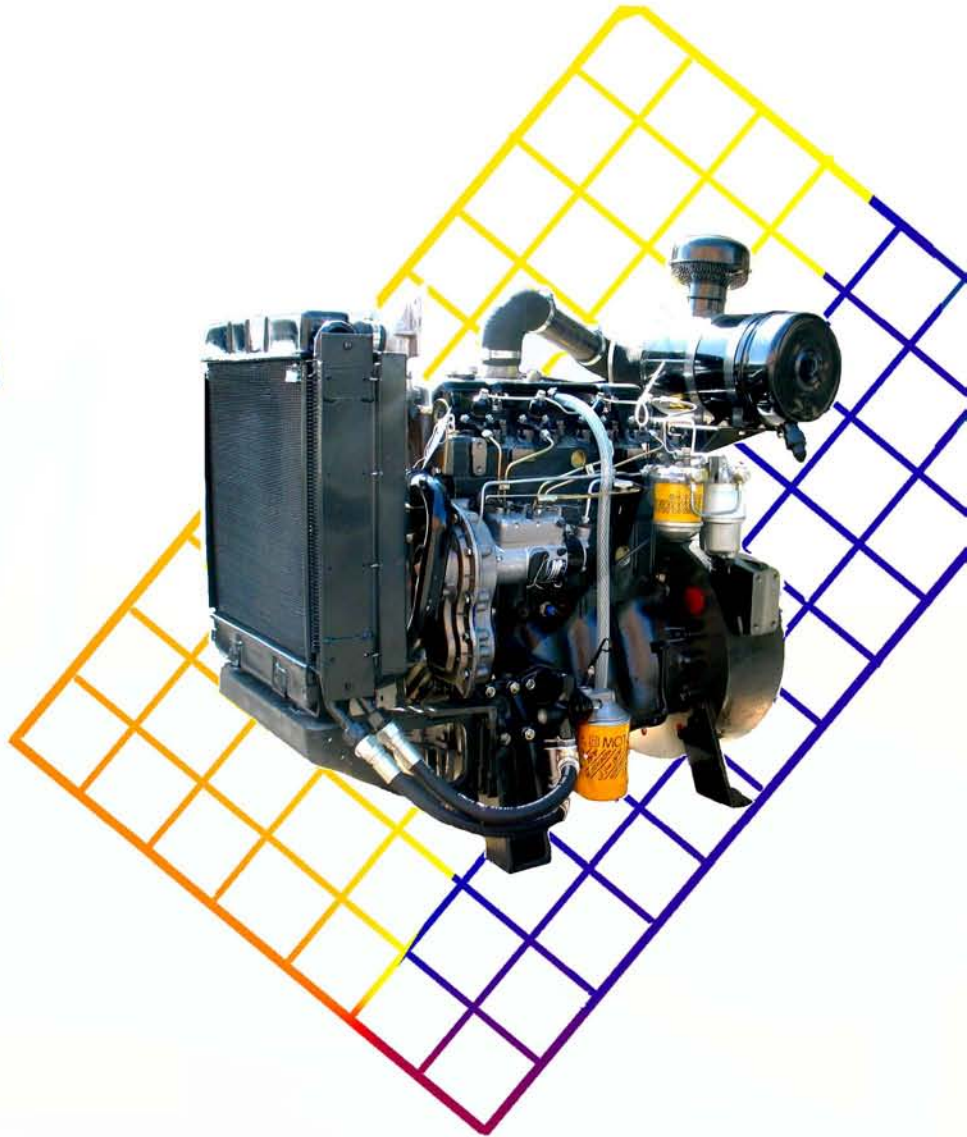
Website: www.motorsazan.ir

Email: mail@motorsazan.ir

- The illustrations may include some optional equipments.
- Motorsazan reserves the right to modify product specifications without prior notice.



4.236G GENSET POWER



Performance

Engine speed rev/min	Type of operation	Typical generator output(net) kVA	Engine Power	
			kW	bhp
1500	Prime power	40	35.5	47.6
	Standby power	44	39.1	52.4



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.

Standard specification

Air filter:

Mounted air filter

Fuel system:

Rotary fuel injection pump
Mechanical governing
Single cartridge fuel filter and prefilter

Lubrication system:

Mild steel sheet with filler and dipstick
Spin-on full-flow oil filter
Remote oil cooler (oil to air cooled)

Cooling system:

Belt driven circulating pump
17" belt driven fan
Mounted radiator and pipework

Electrical equipment:

12 volt starter motor
12 volt 55 Amp alternator with DC output
Switch for oil pressure
12 volt shut down external solenoid energized to run
Cold start aid

Flywheel and Housing:

High inertia flywheel to SAE J620 size 10/11½
Cast iron SAE3 flywheel housing

Mountings:

Front mounting brackets

Optional equipment:

Coolant temperature gauge
Lubrication oil pressure gauge and sender
Heater/Starter switch
Flywheel and coupling suitable for double bearing alternators
Rear mounting brackets

Fuel consumption litres / hour	
Power rating	1500 rev/min
Standby power	11.6
Prime power	10.2
75% of prime power	7
50% of prime power	5.3
25% of prime power	4.1

Basic technical data

Number of cylinder: 4

Cylinder arrangement: Vertical, in line

Cycle: 4 stroke

Induction system: naturally aspirated

Cubic capacity: 3.861 litres (235.9 cu-in)

Bore: 98.4mm (3.875 in)

Stroke: 127 mm (5 in)

Compression ratio: 16:1

Direction of rotation: Clockwise viewed from front

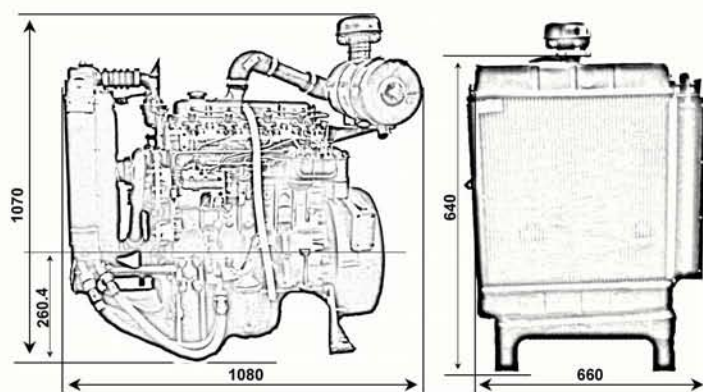
Firing order: 1,3,4,2

Total lubrication system capacity: 8 liter

Coolant capacity (including radiator): 15 liter

Engine total weight (dry): 434kg

Engine total weight (wet): 457kg



All dimensions are in mm

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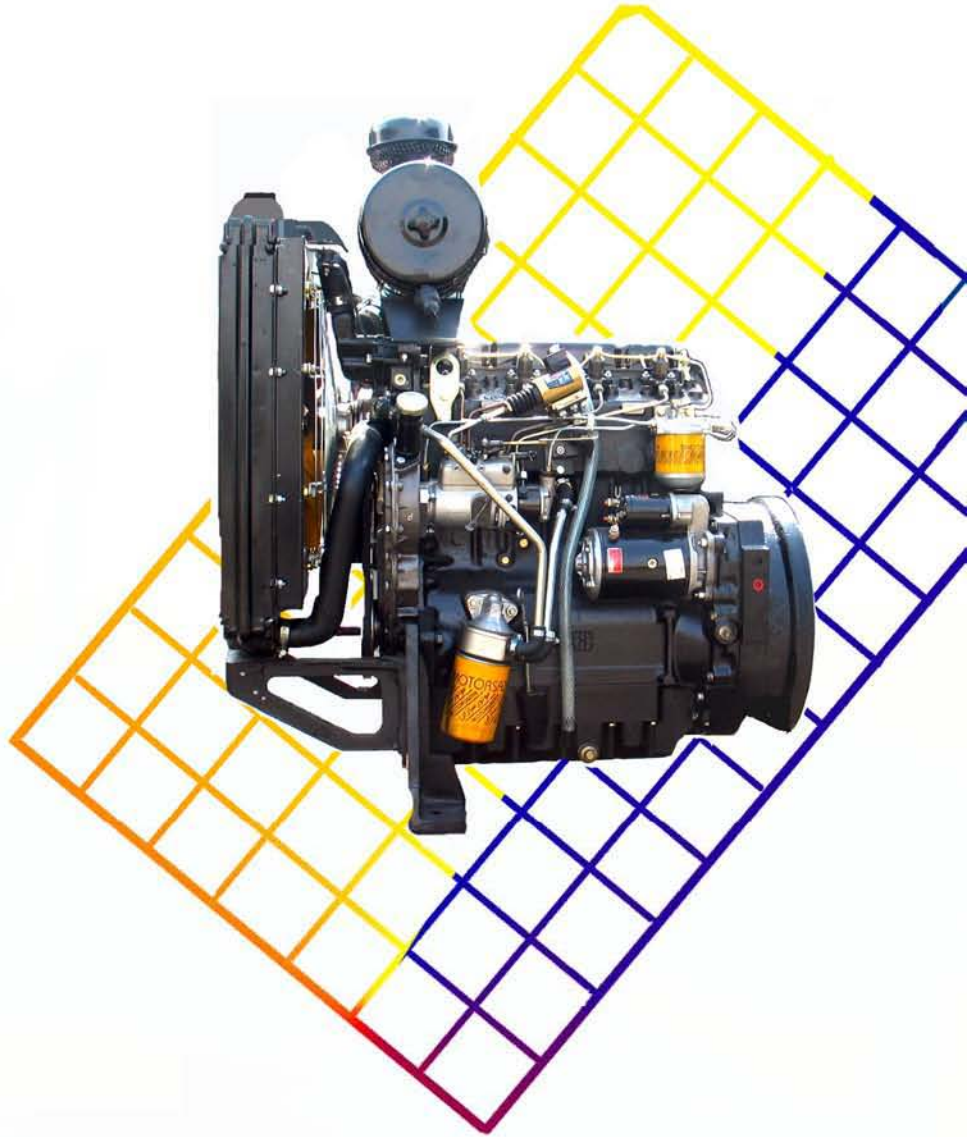
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- The illustrations may include some optional equipments.
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MOTORSAZAN

4.248G GENSET POWER



Performance

Engine speed rev/min	Type of operation	Typical generator output(net) kVA	Engine Power	
			kW	bhp
1500	Prime power	45	40	53.6
	Standby power	49.5	44	58.9



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.

Standard specification

Air filter:

Mounted air filter

Fuel system:

Rotary fuel injection pump
Mechanical governing
Single cartridge fuel filter and prefilter

Lubrication system:

Gray cast iron oil-sump with filler and dipstick
Spin-on full-flow oil filter

Cooling system:

Belt driven circulating pump
17" belt driven fan
Mounted radiator and pipework

Electrical equipment:

12 volt starter motor
12 volt 55 Amp alternator with DC output
Switch for oil pressure
12 volt shut down solenoid energized to run
Cold start aid

Flywheel and Housing:

High inertia flywheel to SAE J620 size 10/11½
Cast iron SAE3 flywheel housing

Mountings:

Front mounting brackets

Optional equipment:

Coolant temperature gauge
Lubrication oil pressure gauge and sender
Heater/Starter switch
Flywheel and coupling suitable for double bearing alternators
Rear mounting brackets

Fuel consumption litres / hour	
Power rating	1500 rev/min
Standby power	11.9
Prime power	9.5
75% of prime power	6.6
50% of prime power	4.3
25% of prime power	2.3

Basic technical data

Number of cylinder: 4

Cylinder arrangement: Vertical, in line

Cycle: 4 stroke

Induction system: naturally aspirated

Cubic capacity: 4 litres (248 cu-in)

Bore: 101 mm (3.975 in)

Stroke: 127 mm (5 in)

Compression ratio: 16:1

Direction of rotation: Clockwise viewed from front

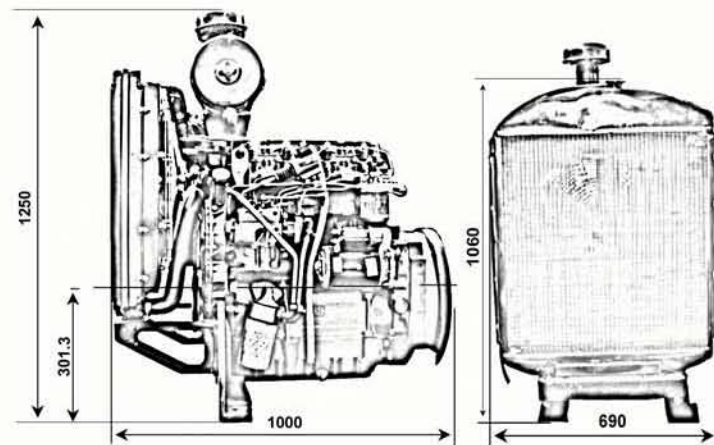
Firing order: 1,3,4,2

Total lubrication system capacity: 7.5 litres

Coolant capacity (including radiator): 16 liters

Engine total weight (dry): 424 kg

Engine total weight (wet): 447 kg



All dimensions are in mm

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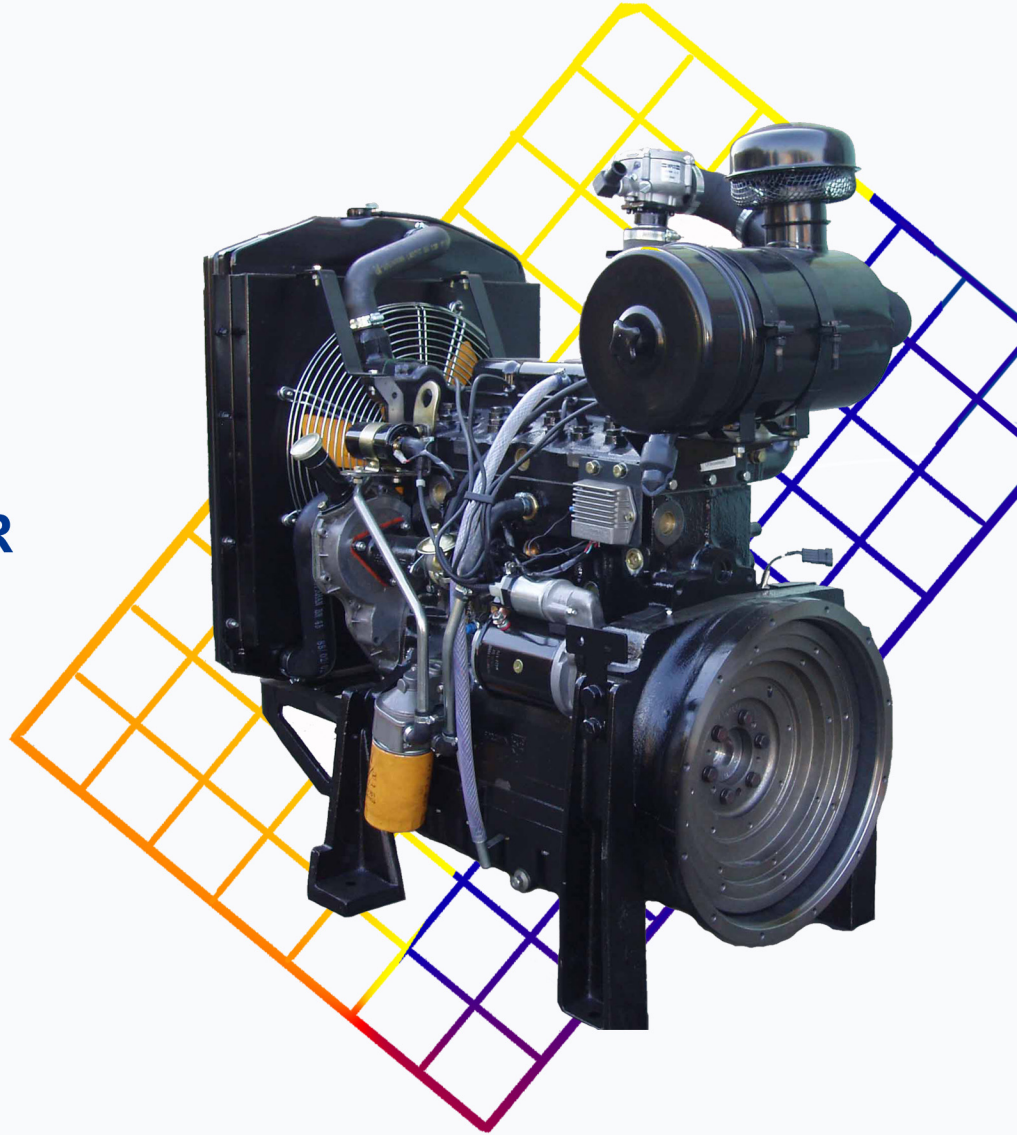
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G4.248 NG

Natural Gas

GENSET POWER



Performance

Engine speed rev/min	Type of operation	Typical generator output(net) kVA	Engine Power	
			kW	bhp
1500	Prime power	38.9	34.6	46.3
	Standby power	43	38.5	51.5



Motorsazan company is certified by TUV NORD for conformity with ISO /TS/16949, ISO 9001, ISO18001, ISO 14001 standards

All ratings based on operating under atmospheric pressure and 20 °C ambient temperature using typical fan sizes and drive ratios.

Performance tolerance quoted by Motorsazan is ±5%.

Electrical ratings assume a power factor of 0.8 and a generator efficiency of 90%.

Fuel specification: Natural Gas

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.

Standard specifications

Air filter:

Mounted air filter

Fuel system:

Single diaphragm air gas valve carburetor/mixer
Electrical governing-controlled by ECU

Lubricating system:

Gray cast iron oil-sump with filler and dipstick
Spin-on full-flow oil filter

Cooling system:

Belt driven circulating pump
17" belt driven fan
Mounted radiator and pipework

Electrical equipment:

12 volt starter motor
12 volt 55 Amp alternator with DC output
Switch for oil pressure
12 volt 4 Amp ECU & throttle

Flywheel and Housing:

High inertia flywheel to SAE J620 size 10/11¹/₂
Cast iron SAE3 flywheel housing

Mountings:

Front mounting brackets

Optional equipment:

Coolant temperature gauge
Lubrication oil pressure gauge and sender
Flywheel and coupling suitable for double bearing alternators
Rear mounting brackets

Gas consumption m ³ / hour at 0.25 Psi	
Power rating	1500 rev/min
Standby power	11
Prime power	10.4
75% of prime power	7.8
50% of prime power	5.2
25% of prime power	2.6

Basic technical data

Number of cylinder: 4

Cylinder arrangement: Vertical, in line

Cycle: 4 stroke

Induction system: naturally aspirated

Cubic capacity: 4.06 litres (248 cu-in)

Bore: 101 mm (3.975 in)

Stroke: 127 mm (5 in)

Compression ratio: 12:1

Direction of rotation: Clockwise viewed from front

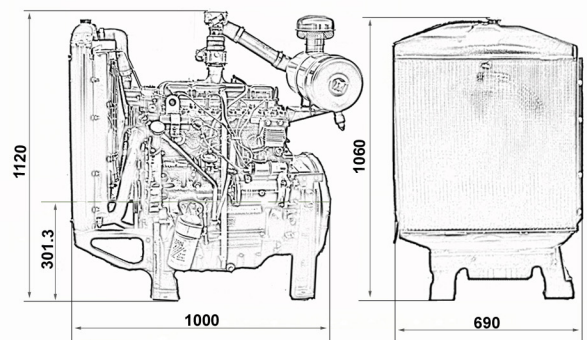
Firing order: 1,3,4,2

Total lubrication system capacity: 7.5 litres

Coolant capacity (including radiator): 16 liters

Engine total weight (dry): 424 kg

Engine total weight (wet): 447 kg



All dimensions are in mm

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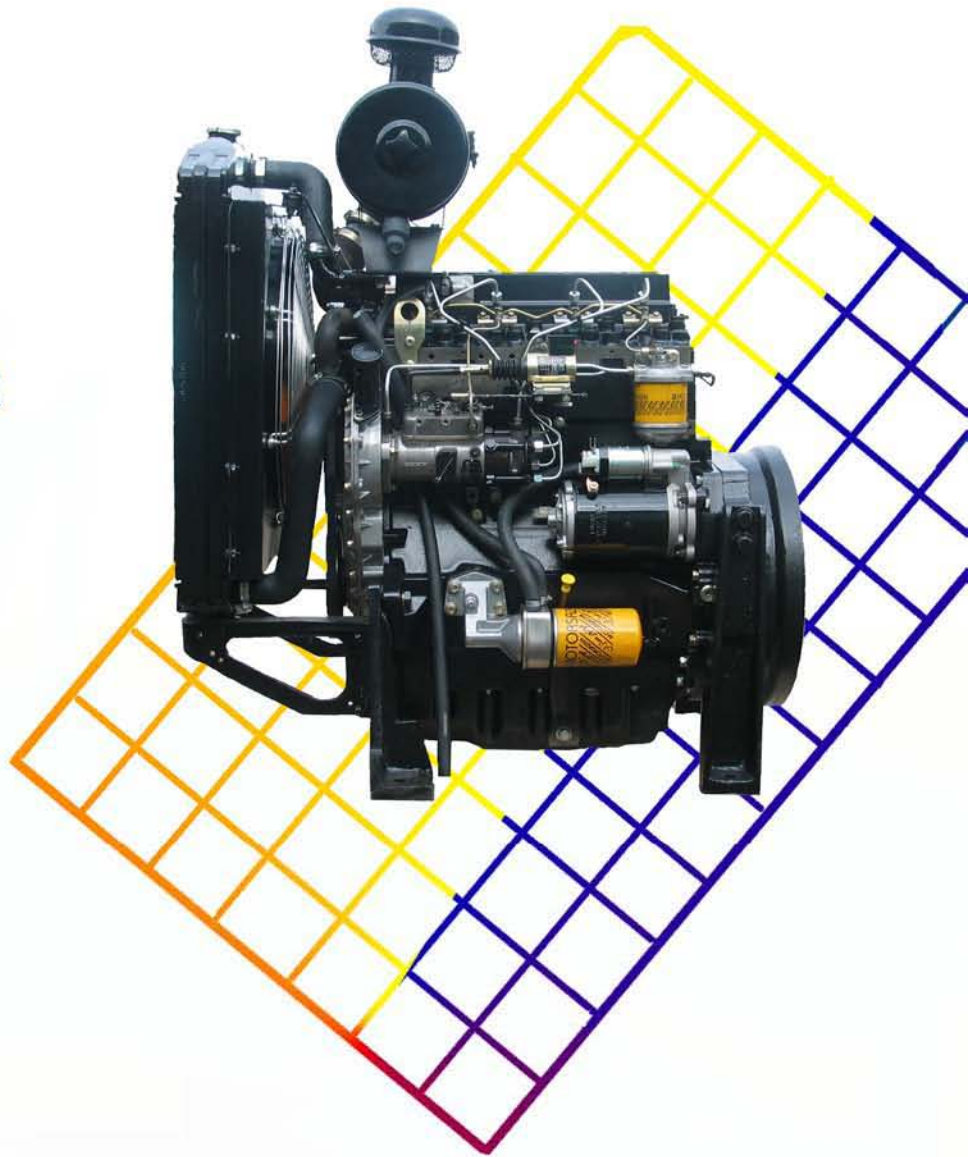
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• The illustrations may include some optional equipments.

• Motorsazan reserves the right to modify product specification without prior notice.



4.41G GENSET POWER



Performance

Engine speed rev/min	Type of operation	Typical generator output(net) kVA	Engine Power	
			kW	bhp
1500	Prime power	45.5	40.5	54.3
	Standby power	49	43.7	58.5



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.

Standard specifications

Air filter:

Mounted air filter

Fuel system:

Rotary fuel injection pump
Mechanical governing
Single cartridge fuel filter and prefilter

Lubrication system:

Flat cast iron oil-sump with filler and dipstick
Spin-on full-flow oil filter

Cooling system:

Belt driven circulating pump
17" belt driven fan
Mounted radiator and pipework

Electrical equipment:

12 volt starter motor
12 volt 55 Amp alternator with DC output
Switch for oil pressure
12 volt shut down solenoid energized to run
Cold start aid

Flywheel and Housing:

High inertia flywheel to SAE J620 size 10/11 1/2
Cast iron SAE3 flywheel housing

Mountings:

Front mounting brackets

Optional equipment:

Coolant temperature gauge
Lubrication oil pressure gauge and sender
Heater/Starter switch
Flywheel and coupling suitable for double bearing alternators
Rear mounting brackets

Fuel consumption litres / heures	
Power rating	1500 rev/min
Standby power	10.9
Prime power	9.7
75% of prime power	7.3
50% of prime power	5.1
25% of prime power	3.4

Basic technical data

Number of cylinder: 4

Cylinder arrangement: Vertical, in line

Cycle: 4 stroke

Induction system: naturally aspirated

Cubic capacity: 4.07 litres (248 cu-in)

Bore: 101 mm(3.97 in)

Stroke: 127 mm (5 in)

Compression ratio: 15.3:1

Direction of rotation: Clockwise viewed from front

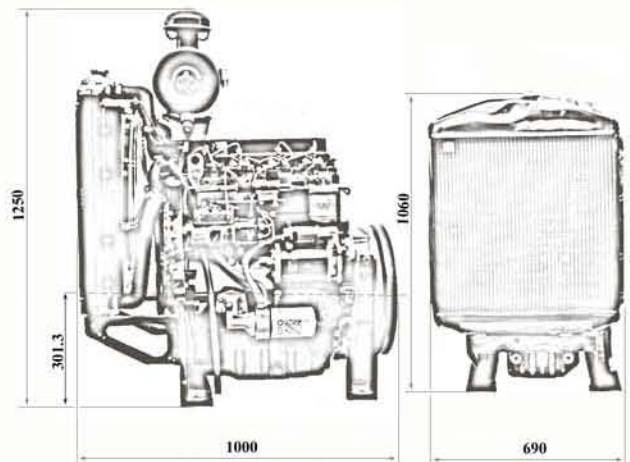
Firing order: 1,3,4,2

Total lubrication system capacity: 8.6 litres

Coolant capacity (including radiator): 18 liters

Engine total weight (dry): 455 kg

Engine total weight (wet): 481 kg



All dimensions are in mm

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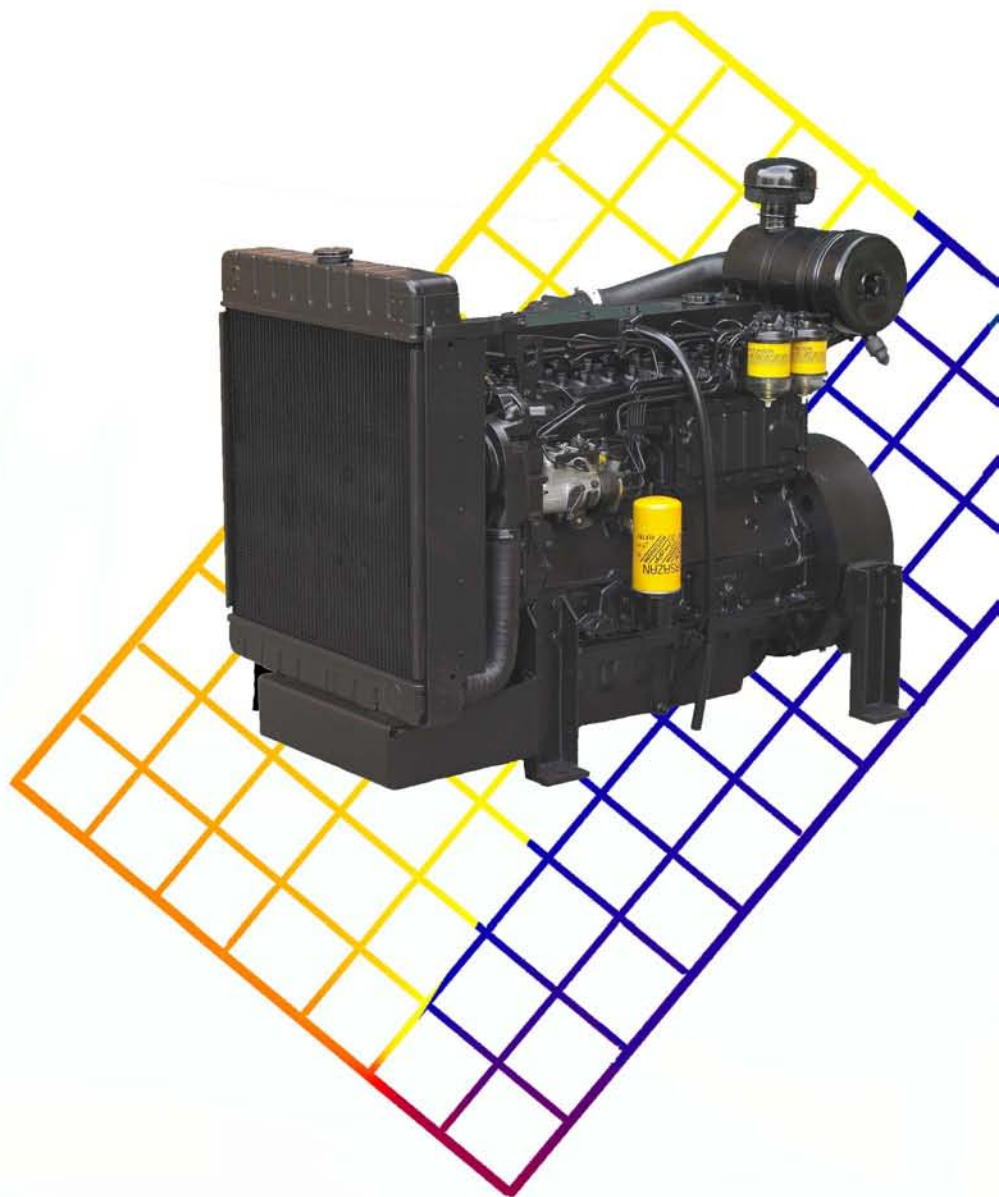
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Email: mail@motorsazan.ir



1006.6G GENSET POWER



Performance

Engine speed rev/min	Type of operation	Typical Generator Output(net) kVA	Engine Power	
			kW	bhp
1500	Prime power	61.5	54.6	73.2
	Standby power	67.6	60.1	80.6



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.

Standard specifications

Air filter:

Mounted air filter

Fuel system:

Rotary fuel injection pump
Mechanical governing
Twin cartridge fuel filter and prefilter

Lubrication system:

Flat cast iron oil-sump with filler and dipstick
Spin-on full-flow oil filler

Cooling system:

Gear driven circulating pump
20" belt driven fan
Mounted radiator and pipework

Electrical equipment:

12 volt starter motor
12 volt 55 Amp alternator with DC output
Switch for oil pressure
12 volt shut down solenoid energized to run
Cold start aid

Flywheel and Housing:

High inertia flywheel to SAE J620 size 10/11½
Cast iron SAE3 flywheel housing

Mountings:

Front mounting brackets

Optional equipment:

Coolant temperature gauge
Lubrication oil pressure gauge and sender
Heater/Starter switch
Flywheel and coupling suitable for double bearing generators
Rear mounting brackets

Fuel consumption litres / heures	
Power rating	1500 rev/min
Standby power	16
Prime power	14.5
75% of prime power	11.4
50% of prime power	8.1
25% of prime power	5.3

Basic technical data

Number of cylinder: 6

Cylinder arrangement: Vertical, in line

Cycle: 4 stroke

Induction system: naturally aspirated

Cubic capacity: 5.985 litres (364.9 cu-in)

Bore: 100 mm(3.937 in)

Stroke: 127 mm (5 in)

Compression ratio: 16.5:1

Direction of rotation: Clockwise viewed from front

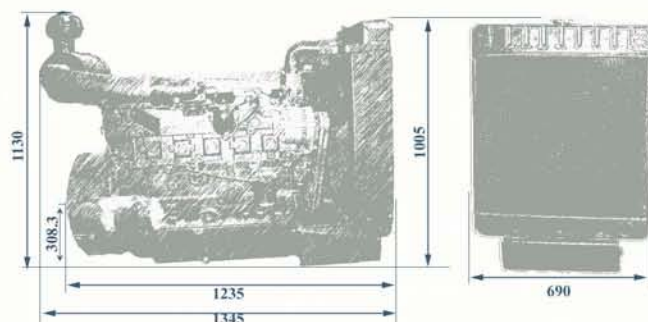
Firing order: 1,5,3,6,2,4

Total lubrication system capacity: 17 litres

Coolant capacity (including radiator): 27 liters

Engine total weight (dry): 640 kg

Engine total weight (wet): 682 kg



All dimensions are in mm

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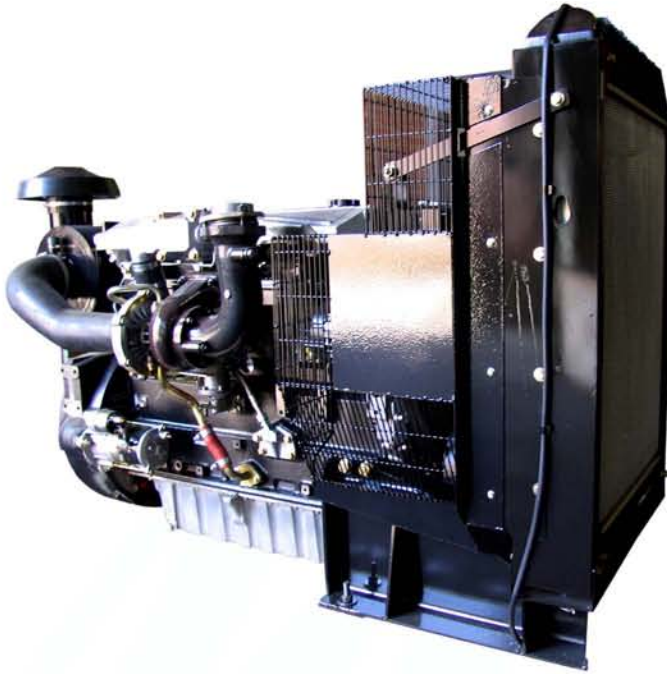
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Email: mail@motorsazan.ir

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MOTORSAZAN



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.

1000 Series

1006TG2A

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

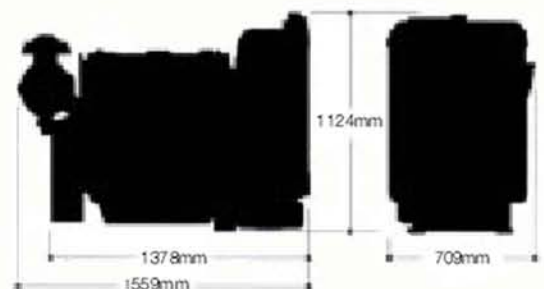
Engine total weight (dry): 586 kg

Engine total weight (wet): 623 kg

Length: 1559 mm

Width: 709 mm

Height: 1124 mm



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