

Gentek 125



KETEK
GROUP

Results Driven.



REFERENCE MATERIALS

ketek.ca

RPM1800 60Hz

RATING RANGE

Emergency:	kW	100
	kVA	125
Prime:	kW	91
	kVA	114



STANDARD FEATURES AND CHARACTERISTICS

QUALITY STANDARDS

All generators comply with international design and quality standards, such as ISO8528 (GB/T2820-97), ISO3046, BS.EN60034, Bs5000, IEC34-1, Gb755, VDE0530, CSA22-2, AS1359, as well as the requirements of ISO 9001 and ISO 14001.

Diesel engine and alternator have their OEM authorization certificates and their quality assurance documentation. Other standards and certifications can be considered on request.

ASSEMBLY

The engine and alternator are close coupled by means of an SAE flange. A full torsional analysis has been carried out to guarantee no harmful vibration will occur. Anti-vibration pads are affixed between engine alternator feet and the base frame, ensuring complete vibration isolation of the rotating assemblies and enabling the machine to be placed on an uneven surface without any detrimental effects. For durability and corrosion resistance, all iron and steel surfaces of the canopy fabrications have been treated for coating by grit blast cleaning and covered with three layers paint, providing an excellent, corrosion-resistant surface.

CONTROL SYSTEM AND PROTECTION

Controllers are available for all applications. Optional controllers include Deep Sea, Comap and other brands. According to their different functions, the control systems can be specified into key start controller model and automatic start controller model. See controller features on page 4.

Prime power

These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1 hour in 12 hours.

Emergency power

Ratings are applicable for supplying continuous electrical power. It is not recommended to run the generator at full power for an extended period of time.

DIESEL ENGINE

Engine Model: 1104D-E44TAG2

BASIC TECHNICAL DATA

Manufacturer	PERKINS
Number of cylinders	6
Cylinder arrangement	Vertical in-line
Cycle	Four stroke
Induction system	Turbo charged
Compression ratio	16:1
Bore (mm)	100
Stroke (mm)	127
Cubic capacity (L)	5.99
Estimated total weight (dry) (kg)	576
Positive air shutoff	

GENERAL INSTALLATION

Engine rated speed (rpm)	1800
Gross engine power-prime (kW)	128.4
Gross engine power-standby (kW)	141
Brake mean effective pressure (kPa)	1767
Mean piston speed (m/s)	6.35
Engine coolant flow (L/min)	140
Combustion air flow (m ³ /min)	8.38
Exhaust gas flow (max) (m ³ /min)	24.14
Exhaust gas temperature outlet (max)	571

LUBRICATION SYSTEM

Lubricating oil capacity	
Maximum sump capacity (L)	7
Total system (L)	8.4
Maximum engine operating angles	
-front up/front down/right side	
or left side	25°
Oil flow at rated speed (L/min)	300-340

FUEL SYSTEM

Fuel tank (L)	260
Type of injection	Direct injection
Fuel injection pump	Rotary
Nozzle opening pressure (MPa)	24.7
Maximum particle size	Bosch/RSU/4 hole
Low-fuel shutoff	

FUEL LIFT PUMP

Type	Electrical
Flow/hour (L/h)	120-150
Pressure (kPa)	30
Maximum suction head (m)	1.8
Maximum static pressure head (m)	3
Governor type	Electrical

FUEL CONSUMPTION

Power rating	
Standby power (L/h)	28.4
100% prime power (L/h)	25.8
75% prime power (L/h)	19.9
50% prime power (L/h)	14

COOLING SYSTEM

Radiator	
Face area	0.401
Rows and materials (m ²)	3 rows, brass
Pressure cap setting (kPa)	68.9
Fan	
Diameter (mm)	635
Drive ratio	1.25:1
Number of blades	10
Material	Composite
Type	Pusher
Coolant	
Total system capacity (with radiator) (L)	37.22
Maximum top tank temperature (°C)	110
Max static pressure head on pump (kPa)	8
Thermostat operation range (°C)	82-93

ELECTRICAL SYSTEM

Alternator	12 V options
Starter motor	12 V
Amps, 1 phase, 120V	300A
Amps, 1 phase, 240V	300A
Amps, 3 phase, 240V	300A
Amps, 3 phase, 480V	150A

Note: All data is based on

1. Engine operating with fuel system, water pump, lubricating oil pump, air cleaner and exhaust silencer; not included are battery charging alternator, fan, and optional driven components.
2. Engine operating with fuel corresponding to grade No.2-DperASTMD975.

3. ISO3046, Part1, Standard Reference Conditions of:
 Barometric pressure: 100 kPa (29.53 in Hg)
 Air temperature: 25 °C (77 °F)
 Altitude: 110m (361 ft)
 Relative humidity: 30%
 Air intake restriction: 254 mm HO (10 in H₂O)
 Exhaust restriction: 51 mm Hg (2 in Hg)

Altitude: Derate 2.0% per 300m (984 ft.) elevation above 1000m (3279 ft.) up to a maximum elevation of 2450m (8000 ft.). More than 2450m (8000 ft.), please contact us or our dealer for help. Temperature: Derate 6.0% per 11°C (20°F) temperature above 40°C (104°F).

STAMFORD ALTERNATOR

Alternator Model	UCI274C
Frequency and Speed	60Hz/1800rpm
Voltage (V)	240/120-480
Prime capacity (kVA)	117.5
Prime power (kW)	94
Power efficiency (%)	90.6
Input power (kW)	103.8
Voltage regulation	±0.5%
Rated power factor	0.8
Stator winding	2/3
Maximum overspeed	2250 rpm
Sustained short circuit	300 Amps
Cooling Air (m ³ /sec)	0.617

Alternators meet the requirement of BS EN 60034 and the relevant section of other international standards such as BS5000, VDE 0530, NEMA MG1-32, IEC34, CSAC22.2-100 and As1359. Other standards and certifications can be considered on request.

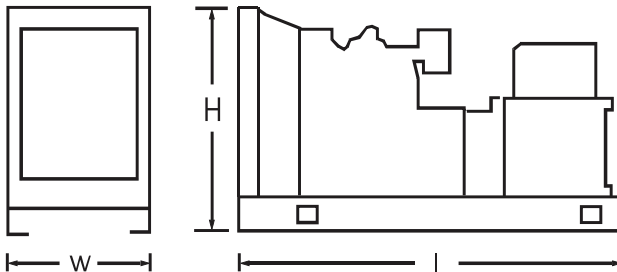
The 2/3 pitch design avoids excessive neutral currents. The 2/3 pitch, and carefully selected pole and tooth designs, ensure low waveform distortion. Brushless alternator with brushless pilot exciter for excellent load response.

The insulation system is class H, easy parallelling with mains or other generators. Standard 2/3 pitch stator windings avoid excessive neutral currents.

DIMENSIONS AND WEIGHTS

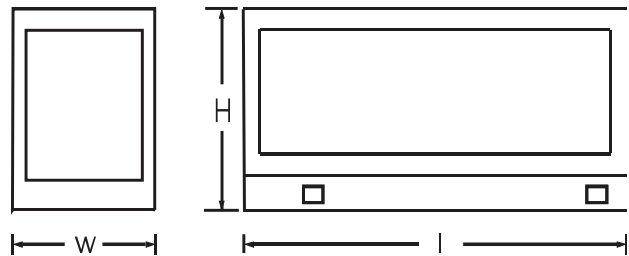
OPEN GENERATOR

Overall size (mm)	L 2500 W 950 H 1600
Weight (radiator model) (kg)	1600



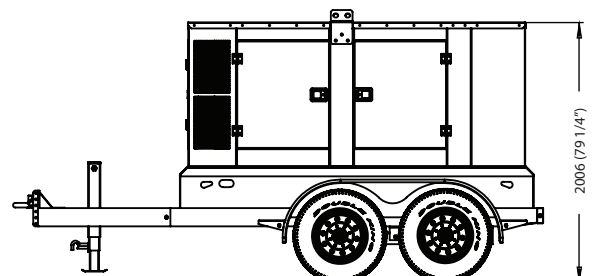
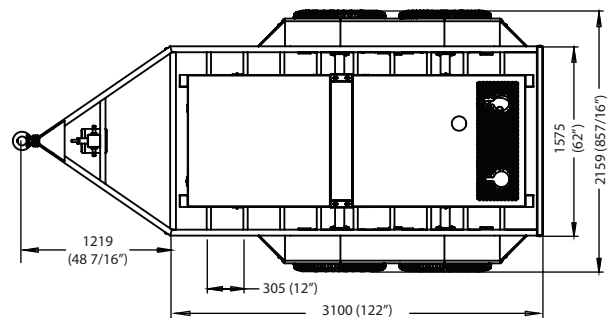
SOUNDPROOF GENERATOR

Overall size (mm)	L 2500 W 1050 H 1600
Weight (radiator model) (kg)	1800
Noise level	65dba/7m



OPTIONAL TRAILER

Overall size (mm)	L 4318 W 2159 (170"x 85")
Axles	2 x 3175 kg (7,000 lbs)
Jack	5443 kg (12,000 lb) side-wind
Suspension	Torflex slipper spring
Tires	ST 235-80R16 10-ply



- Adj pintle eye coupler
- LED lights
- Crossmembers on 12" centres. Bottom of crossmembers flush with bottom of frame
- Extra protection for wiring

DEEP SEA CONTROL SYSTEM

Model DSE7320



STANDARD FUNCTIONS

- Engine Control
- Generator Monitoring
- Generator Protection
- Engine Monitoring
- Clear Text Display

SHUTDOWN

- Loss of Speed Signal
- Alternator Under/Over Voltage
- Alternator Under/Over Frequency
- Mains Under/Over Voltage
- Mains Under/Over Frequency
- Under/Over Speed
- Low Oil Pressure
- High Engine Temperature
- Phase Sequence Electrical (Option)
- Earth Fault (Option)

WARNING

- Alternator Under/Over Voltage
- Alternator Under/Over Frequency
- Mains Under/Over Voltage
- Mains Under/Over Frequency
- Under/Over Speed
- Low Oil Pressure Pre-Alarm
- High Engine Temperature Pre-Alarm
- High/Low Battery Voltage
- Over-current
- Periodic maintenance

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