



"Your Complete Generator Solution"



EPA Certified / Stationary Emergency

OUTPUT POWER					sKVA
Voltage	Phase	Hertz	kW/kVA	Amps	30% Voltage Dip
120/240	1	60	80/80	333	230

Information on optional alternators available upon request.

Overall Size: 81"L x 36"W x 69"H
Weight: 2,370 lbs.

Standard Features:

- Heavy Duty Steel Base
- Vibration Isolators
- Battery Rack & Cables
- High Ambient Unit Mounted Radiator
- 15 ft. Fuel Line Set
- Spark Arrestor Muffler
- Battery Charging Alternator
- 5 Amp Battery Charger
- PMG Pilot Exciter
- 120V/1500W Water Jacket Heater
- Factory Test Prior to Shipment
- Owner's Manual

Miscellaneous Options:

- Automatic Transfer Switch
- Fuel Tanks 150-1000 Gallons

Warranty

2 Year Standard Limited



Analog Controller with Emergency Bypass Key Switch

- Automatic CANBUS Engine Control
- Oil Pressure, Water Temperature, Battery Voltage and RPM Gauges
- Automatic Gauge Zeroing on Shutdown
- AC Voltage, Frequency, Percent of Load, and Run-Time Metering
- 3-Position Auto-Off-Manual Control Switch
- LED Status Lights: Low Oil Pressure, High Temperature, Overcrank, Overspeed, and Engine Start
- Impact-Resistant Polycarbonate Bezel and Epoxy Encapsulated

GENERAL GUIDELINES FOR DERATION: Altitude: Derate 0.5% per 100m (328 ft.) Elevation above 1000m (3279 ft.) Temperature: Derate 1.0% per 10°C (18°F) temperature above 25°C (77°F)

RATINGS: All single-phase units are rated at 1.0 power factor.

STATIONARY EMERGENCY STANDBY: Applies to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046/1, BS 5514, AS 2789, and DIN 6271.



Engine Data

Manufacturer	Perkins
Model	1104D-E44TAG1
Aspiration	Turbocharged
EPA Tier	3
Charge Air Cooling System	Air-to-Air
Arrangement	Vertical Inline, 4-Cycle
Firing Order	1-3-4-2
Displacement: L (in. ³)	4.4 (268.50)
Bore: mm (in.)	105.00 (4.13)
Stroke: mm (in.)	127.00 (5.00)
Compression Ratio	16.2:1
BMEP: psi (kPa)	212.77 (1467.00)
Net Horsepower	121.67
Rated RPM	1800
Governor	Isochronous
Speed Regulation	±0.25%

Engine Liquid Capacity

Oil System: qt. (L)	8.45 (8.00)
Cooling System Capacity: gal (L)	4.49 (17.00)

Engine Electrical

Electric Volts: DC	12
Cold Cracking Amps	925
Battery(s) Required	1

Exhaust System

Gas Temperature: °F (°C)	917.60 (492.00)
Gas Flow: CFM (m ³ /min)	632.13 (17.90)
Max Exhaust Back Pressure: in. H ₂ O (kPa)	60.20 (15.00)
Spark Arrestor Outlet Size: in. (mm)	3.0 (76.2)

Alternator Data

Manufacturer	Marathon
Type	PMG
Insulation NEMA Rise/Temp	NEMA H/150°C
Hertz	60
Phase	1
RPM	1800
Leads	4
Amortisseur Windings	Full
CFM Cooling Required	700
Voltage Regulator	PM500
Sensing	Single Phase
Voltage Regulation, No Load - Full Load	0.5%

Air Requirements

Air Filter(s) Type	Dry
Combustion Air Flow: CFM (m ³ /min)	271.9 (7.7)
Cooling Fan Air Flow: CFM (m ³ /min)	7013.5 (198.6)
Maximum Air Intake Restriction	
Clean: in. H ₂ O (kPa)	20.07 (5.00)
Dirty: in. H ₂ O (kPa)	32.11 (8.00)

Sound Level

Open Unit Without Exhaust: dBA 3.2 ft (1M)	105.5
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Filters and Quantity

Air Cleaner Quantity	1
Oil Filter(s) Quantity	1
Fuel Filter(s) Quantity	2

Fuel Consumption

At 100% of Power Rating: gal/hr (L/hr)	6.26 (23.69)
At 75% of Power Rating: gal/hr (L/hr)	4.95 (18.74)
At 50% of Power Rating: gal/hr (L/hr)	3.58 (13.55)
At 25% of Power Rating: gal/hr (L/hr)	N/A

Fuel System

Fuel Injection Type	Direct
Fuel Pump Rate: gal/hr (L/hr)	34.34 (130.00)
Pump Pressure: in. H ₂ O (kPa)	40.13 (10.00)
Recommended Fuel	Low Sulfur Diesel

Cooling System

Rejection to Charge Cooler: kW (BTUM)	13.90 (790.48)
Rejection to Coolant: kW (BTUM)	53.6 (3048.2)
Coolant Flow: gal/min (L/min)	44.65 (169.00)

Alternator Features

- NEMA MG1-32, BS5000, and IEC 34-1 compliant; CE & CSA Certified and UL Listed
- Self-ventilated and drip proof construction
- Two-thirds pitch stator and skewed rotor
- Wet wound, epoxied field windings
- Designed to withstand overspeeds of up to 125%
- Hybrid analog/digital voltage regulator
- Under frequency protection
- Under frequency indication light
- Less than one cycle response time
- Over excitation protection
- Over excitation indication light
- Easy access front-panel adjustments
- Over voltage protection shutdown
- Analog input for paralleling