



Power When You Need It



Standard Enclosed Generator Set Features

- Perkins Diesel Engine Model 403C.10, Tier II
- Single Bearing Direct Coupled Alternator With Class 'H' insulation, Sized for 150°F Temperature Rise.
- Weather Protective Sound Attenuated Enclosure constructed of Marine Grade Aluminum with White Powder Coat Paint Finish & Stainless Steel Hardware. Enclosure includes:
 - Critical Rated Interior Mounted Exhaust Silencer & Stainless Steel Flex Connection
 - Oil & Coolant Drain Lines w/ Ball Valves
 - Hinged / Removable / Keyed Alike Doors
- Control Panel (NFPA/UL Approved) Mounted to Enclosure with access door to allow exterior viewing.
- Mounted on Steel Sub-Base with four (4) vibration isolators, Corner Lifting Eyes and opening for Electrical Stub-up. Optional Single and Dual Wall Fuel Tanks for 12 and 24 hour operation.
- Radiator sized for 120°F Ambient Clearance
- Dry Type Air Cleaner.
- 12-Volt Starter, Engine Mounted Battery Charging Alternator, Battery Cables, and Rack along with Grounding Strap.
- Full Load Factory Test with Safety Shutdown.
- One Complete Operation and Maintenance Manual.

Generator Set Ratings - Stand-by

Voltage	PH	Hz	Standby Output kW (kVA)	Prime Output kW (kVA)	Max Alt SkVA	Standby Max Amp Output	# of Wires
120/240	1	60	9 (9)	8 (8)	10.1	37.5	12
120/208	3	60	9 (11.2)	8 (10)	10	31.2	12
120/240	3	60	9 (11.2)	8 (10)	10	27.1	12
277/480	3	60	9 (11.2)	8 (10)	13.5	13.5	12

Stand-by ratings are applicable for the duration of any power outage. No overload is available at these ratings. Prime ratings are continuous per BS 5514, DIN 6271, ISO3046 & IEC 34-1. Overload capacity on prime-power ratings is 10% for one hour in each twelve hours of operation. All single phase ratings are based on a 1.0 power factor, three (3) phase ratings based on a .8 power factor. Ratings are established based on 85°F (29°C) and an elevation of 1,000 feet (305 meters). Please consult your Tradewinds representative for information concerning derates for temperature, altitude & humidity.

Standard Open Generator Set Features

- Perkins Diesel Engine Model 403C.10, Tier II
- Single Bearing Direct Coupled Alternator With Class 'H' insulation, Sized for 150°F Temperature Rise
- Vertical Industrial Exhaust Muffler with Rain Cap, (Loose)
- Mounted on Steel Sub-Base with four (4) vibration isolators, Corner Lifting Eyes and opening for Electrical Stub-up. Optional Single and Dual Wall Fuel Tanks for 12 and 24 hour operation.
- Radiator sized for 120°F Ambient Clearance
- Control Panel (NFPA/UL Approved) Mounted to Alternator with Auto Start/Stop.
- Dry Type Air cleaner
- 12-Volt Starter, Engine Mounted Battery Charging Alternator, Battery Cables, and Rack
- Full Load Factory Run Test With Safety Shutdown.
- One Complete Operation and Maintenance Manual.

Optional Equipment

- Thermostatically Controlled Jacket Water Heaters
- Single & Dual Wall Sub-base Fuel Tanks
- Cylindrical Skid Mounted Fuel Tanks
- Main Line Generator Circuit Breakers
- Shunt Trip for Circuit Breakers
- Critical Rated Exhaust Silencers
- Oversized Generator Ends for Motor Starting
- PMG Generators and Special Voltage Regulators
- Automatic Paralleling packages
- Remote Annunciators.
- Standard Load Centers Mounted in NEMA 3R Enclosures with Plugs.
- Automatic Transfer Switches
- Automatic Battery Chargers
- Water Separator Fuel Filters
- Special Insulation for Generators
- Generator Drip Covers
- ISO Container "Mipco Type Plugs"
- Day Tanks
- Starting Batteries
- Street Legal Trailers
- Custom Colors for Gen and Enclosure

Engine Specifications - Tier II Compliant

Model: Perkins 403C.10

Max. Power: 15.4hp / 11.5kW @ 1800 rpm
 69 cu. in. / 1131 cc - Bore & Stroke: 3.0" x 3.2" (77x 81mm)
 Naturally aspirated, 3 cylinder in-line
 Indirect injected
 Governor type - Mechanical
 Freq. Regulation: Isochronous, Steady-State
 Electrical system: Starter, 12-volt. Alternator 51 amp
 Recommended Battery size: 640 CCA

Fluids:

Oil capacity - 5.2 quarts (4.9liters)
 Oil Filter - Dry type, Spin
 Coolant capacity - 5.5 quarts (5.2liters)

Fuel Consumption (US gal. per hour / Liters per hour)

25% load - .31 (1.2) 75% load - .63 (2.4)
 50% load - .47 (1.8) 100% load - 1.0 (3.8)

Alternator Specifications

Marathon Electric Alternator: Brushless, 4-Pole Rotating Field, Self-ventilating drip-proof construction.
Voltage Regulator: Solid State: Volts/Hertz
Insulation: Class 'H' to NEMA MG-1-1.66
Rated Temperature Rise: 150 C°, Standby
Bearing Type / Number Sealed / Single
Coupling: Direct Coupled, Flexible Disc
Voltage regulation: + / - 1%, Solid State
Load acceptance: One Step, 100% per NFPA 110

Features:

Superior voltage waveform achieved by a two-thirds pitch and skewed rotor.
 Vacuum-impregnated windings with fungus-resistant epoxy for dependability and long-life.
 Compliance with NEMA, IEEE and ANSI standards for temp rise.
 Sustained short-circuit capability enabling down-line circuit breakers to trip without collapsing the generator field.
 No load to full-load regulation of +/- 2%.

Panel Specifications and Functions

Compact Control with auto-start logic:

Simple and Basic Control Functions:
 Mechanical Voltmeter, Hour Meter, Oil Pressure,
 Water Temperature Gauges with panel mounted
 DC Circuit Breakers

Standard features:

- DC Supply-8-35v Continuous
- Max Current-Operation 50mA Standby 10mA
- 75Volts (ph-N) to 277 volts (ph-N). 3ph 4wire
- Start output: 1.2amp DC at Supply voltage

- Auto Start Stop Control with Standard 3 Start Attempts
- Fail to Start (led)
- Adjustable Start Stop Controls
- Low oil pressure warning & shutdown (led)
- High engine temperature warning & shutdown (led)
- Battery Charging Alternator Warning (led)
- Overspeed and Underspeed Frequency Protection
- Fuel Output: 1.2amp DC, at Supply voltage.
- Auxiliary Outputs: 1.2amps at Supply Voltage (2 leds)
- Operating Temperature Range: -30°C to +70°C

- Configurable Preheat Timers
- Energize to Stop Functions
- External remote start input
- Charger Failure Alarm
- 2 configurable inputs
- Aluminum Control Panel Box
3 Vibration mounts.

COMPLIANT TO THE FOLLOWING SPECS:

- BS EN 60950 Low Voltage Directive
- BS EN 50081-2 EMC Directive

Dimensional and Mounting Specifications

Open Style Unit

L x W x H inches / (mm): 75" (1905) x 32" (813) x 37.75" (959)
 Overall Dry Weight lb. (kg): 820 (372)

Enclosed Style Unit

L x W x H inches / (mm) 75" (1905) x 32" (813) x 48" (1219)
 Dry Weight lb. (kg): 1325 (601)

Note:

Electrical Stub area is positioned at the rear of the sub-base fuel tanks. Spacing from rear access cover to the tank is approximately 9 inches (228.6 mm). This dimension is for both UL rated and single wall fuel tanks.

Authorized Dealer:

