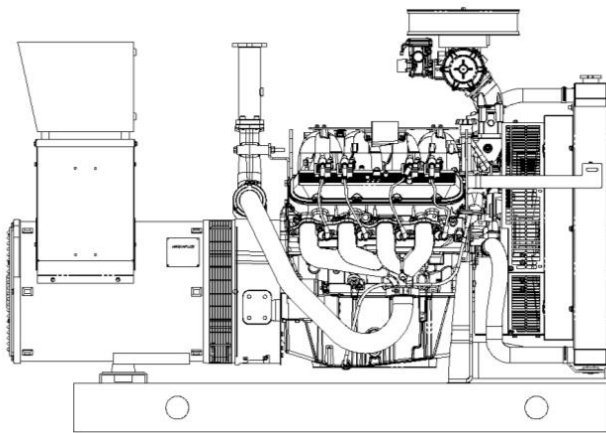


DIESEL POWER GENERATOR SET

Marine Prime Rating



Drawing is for reference only.



Standard Features

- SENECA provides one-source responsibility for the generating system and accessories. All generator sets and components are factory built, and production tested.
- Generator set load acceptance ratings are as per CSA282 and NFPA 110
- Eighteen months limited warranty covers all systems and components. Two and five year extended warranties are available.
- Baudouin Diesel engine that meets the latest EPA emissions requirements
- Stamford brushless synchronous alternators with dynamic balancing and four pole construction
- Permanent Magnet (PM) generator provides superior short circuit capability
- Microprocessor based controller that's easy to use and field programmable for customized installations
- Integral Vibration isolation rubbers eliminate the need of vibration spring isolators
- Generator sets are prototype tested and production tested to ensure easy startup
- Heavy duty construction that's designed for use in prime or standby applications
- Assembled in Canada

Voltage	Phase	P.F.	KW	KVA	Amps	Temp. Rise	Alternator
120/240V	1	1	70	70	292	90/50C	UCM274F
120/208V	3	0.8	70	87.5	243	90/50C	UCM274C
120/240V	3	0.8	70	87.5	210	90/50C	UCM274C
277/480V	3	0.8	70	87.5	105	90/50C	UCM274C
346/600V	3	0.8	70	87.5	84	90/50C	UCM274C

Other configurations are available. Please contact factory if your intended application is not listed.

RATINGS: Standby ratings are continuous for the duration of any power outage. No overload capacity is specified at this rating. Prime ratings are continuous per BS 5514, DIN 6271, ISO-3046, and IEC34-1 with 10% overload capacity one hour in twelve hours. Larger alternators may be used to meet special application requirements. SENECA reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. Contact your local SENECA generator distributor for availability.

GENERAL GUIDELINES FOR DERATION: ALTITUDE: Derate 1.5% per 1000 ft. (305 m) elevation above 3300 ft. (1006 m). TEMPERATURE: Derate 0.5% per 10°F (5.5°C) temperature above 77°F (25 °C).

ALTERNATOR

Manufacturer	Stamford
Design	Brushless, 4 pole, Revolving field
Stator	2/3 pitch
Rotor	Single Bearing, Flexible disc
Insulation system	Class F
Standard temperature rise	90/50C
Exciter type	Torque match (shunt) standard PMG available
Phase rotation	A(U), B(V), C(W)
Alternator cooling	Direct drive centrifugal blower fan
AC waveform total harmonic distortion	< 3.5% no load to full linear load < 2.5% for any single harmonic

ENGINE SPECIFICATIONS

Manufacturer	Baudouin
Model	4M10G83/6
Number of Cylinders	4
Bore and Stroke – in. (mm)	4.13 x 4.64 (105 X 118)
Displacement – in ³ (L)	249.40 (4.087)
Compression Ratio	17.5:1
Valves per Cylinder--Intake/Exhaust	2/2
Combustion System	Compression ignition
Engine Type	Inline, 4 cycle
Aspiration	Turbo-charged
Engine Crankcase Vent System	Open

EXHAUST SYSTEM

Exhaust Flow – ft ³ /min (m ³ /min)	1603 (26.27)
Exhaust Temperature – °F (°C)	1022 (550)
Max. Exhaust Restriction – in. H ₂ O (kPa)	20.09 (5)

FUEL SYSTEM

Governor Type	Electronic
Injection Pump	Bosch Common-rail Pump
Fuel Filter	Full flow, Cartridge type

LUBRICATING SYSTEM

Oil Press. at Rated Speed – psi (kPa)	36.26 (250)
Oil Pressure at Low Idle – psi (kPa)	14.5 (100)
Oil Capacity (with filter) – USGal (L)	2.27 (8.6)
Oil temperature (Max.) – °F (°C)	275 (135)

COOLING SYSTEM

Engine Heat Reject. – BTU/min (kW)	TBD
Ambient Operating Temperature – °F (°C)	122 (50)
Coolant Flow – USgal/min (L/min)	NA
Coolant capacity, including Radiator – USgal (L)	4.73 (18)
Pressure Cap - psi (kPa)	TBD

AIR SYSTEM

Maximum Air Intake Restriction - in.H ₂ O (kPa)	24 (6)
Engine Air Flow – ft ³ /min (m ³ /min)	230.6 (6.53)
Cooling fan air flow ft ³ /min (m ³ /min)	5177.13 (146.6)

FUEL CONSUMPTION

Diesel, L/Hr	
100%	21.57
75%	16.46
50%	10.99
25%	6.75

ENGINE PERFORMANCE DATA

Rated Power, Diesel --hp (kW)	114 (85)
Rated Speed -- RPM	1800
Break Mean Effective Pressure -- MPa	TBD

Block Heater Data

Manufacturer	OEM
Model	Glow Plug
Voltage	12V
Power	NA

Battery, Charger and Electrical

Battery Charger	Vulcan electric inc.
Output Voltage	12 VDC
Output Current	10A
Battery PN	624MF
Battery CCA	650
Off Shore Panel	CSA Standard

Engine Controller Panel



Engine Control & Monitoring

- **Auto Start Control:** Cycle cranking with integral speed sensor from engine mounted magnetic pick-up for crank disconnect and over speed protection
- **6 Programmable Binary Fault Alarms/Shutdown Inputs:** Alarms/shutdowns to meet/exceed requirements of NFPA 99, 110 & CSA 282
- **Engine Parameter Display:** Digital display of oil pressure, coolant temp, battery voltage, RPM, and fuel level
- **5 Programmable Outputs** (when AMF option is utilized, 2 outputs are dedicated for AMF control): programmable functions such as common alarm and shutdown contacts for remote indication
- **Configurable Set Points/Time Delays:** Password protected access to set time delays (engine start, crank, rest, cool down, oil bypass etc)
- **Event Logging:** Standard 150 event logs with time/date stamp capability utilizing on board real-time clock with battery back-up

Genset Standard Features

- Steel Base
- 90C Temperature Rise Alternator
- Block Heater, Isolation Valve
- Battery, NOCO charger, rack and Cables
- Standard Factory Test
- E100 Deep Sea controller
- 1" Spring Isolator
- 18 Months Warranty

Available Options

Open Unit

- Exhaust Silencer, Critical Grade
- Exhaust Silencer, Hospital Grade
- Exhaust Silencer, Hospital Plus Grade
- Special Silencer

Cooling System

- Radiator Duct Flange

Electrical System

- Battery Charger, Vulcan
- Battery Charger, Thomson technology
- Battery Charger, Special Requirement
- Battery Heater
- 150 C Temperature Rise Alternator
- 105 C Temperature Rise Alternator
- 80 C Temperature Rise Alternator
- Alternator Strip heater
- RTD

Engine and Generator

- Air Cleaner, Heavy Duty
- Air Cleaner Restriction Indicator
- Load Bank Breaker
- Line Circuit Breaker with Shunt Trip, Aux Switch
- 2" Spring Isolators
- Seismic Spring Isolators

Governor

- Voltage Adjust Potentiometer
- Voltage Regulator Relocation Kit

Controller

- Common Failure Relay
- Customer Connection
- Remote Annunciator Panel
- Dry Contact Kit (Isolated Alarm)
- Extension Wiring Harness for Remote Mounting
- Remote Emergency Stop
- Run Relay
- Available harness in multiple lengths to meet setup

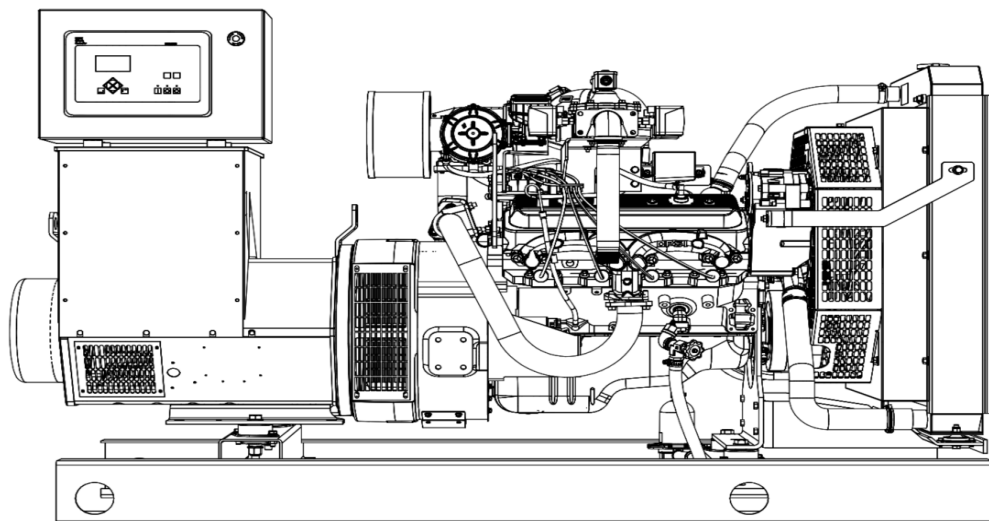
Enclosure

- Walk-In Enclosure
- ISO Sea Freight Enclosure
- Skin Tight Enclosure
- Sound Attenuated 75 dBA at 7m
- Sound Attenuated 65 dBA at 7m
- Weather Proof Enclosure
- CSA 282 Compliance Kit

Warranty

- 2 Year Extended Warranty
- 5 Year Extended Warranty

*NOTE: These are provided for reference only and should not be used for planning installation.
Contact your local distributor for more detailed information.*



Open Skid Genset

Size: 81.31" X 31" X 43.77"
Weight: 2418.2 lbs
Sound Rating: TBD

CONTACT

Sales

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Service

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Assembled in Canada by

