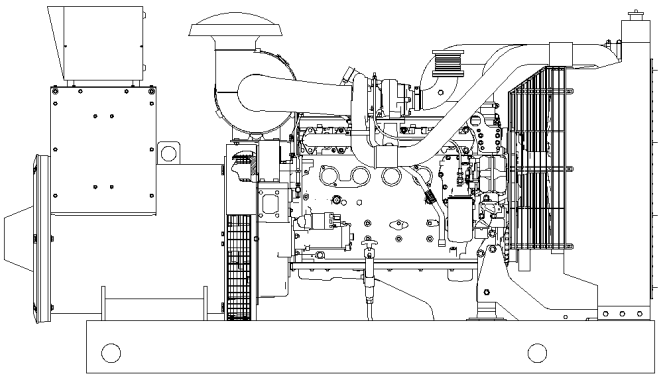
150DFM3

DIESEL 120/240, 120/208, 347/600 V @ 60Hz

Standby Rating	**150kW**
Prime Rating	**135kW**

Please contact factory for other ratings



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.

A one-year limited warranty covers all systems and components. Two and five year extended warranties are available.

Generator Features:

- FPT Iveco heavy-duty industrial DIESEL engine that meets the latest EPA emissions requirements
- Marathon Electric Generator brushless synchronous alternator with dynamic balancing and four pole construction
- Microprocessor based controller that's easy to use and field programmable for customized installations
- 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	Hz	125°C Rise Standby Rating kW/kVA	Current (A)	105°C Rise Prime Rating kW/kVA	Current (A)
120/240	1	60	150/150	625	135/135	562
120/208	3	60	150/188	520	135/169	468
347/600	3	60	150/188	180	135/169	162

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^{O}F (5.5^{O}C) temperature above 77^{O}F ($25\ ^{O}$C).

ALTERNATOR

Manufacturer	Marathon
Design	Brushless, 4pole, Revolving field
Stator	2/3 pitch
Rotor	Single Bearing, Flexible disc
Insulation system	Class H
Standard temperature rise	125C
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	< 5% no load to full linear load < 3% for any single harmonic

ENGINE SPECIFICATIONS

Manufacturer	FPT
Model	N67 TE1X
Number of Cylinders	6
Bore and Stroke – in. (mm)	4.09x5.20 (104x132)
Displacement – in^3 (L)	410 (6.7)
Compression Ratio	16.5:1
Valves per Cylinder – Intake/Exhaust	2/2
Firing Order	1-5-3-6-2-4
Combustion System	Direct Common Rail
Engine Type	In-line, 4 cycle
Aspiration	Turbocharged
Charge Air Cooling System	Air-to-Air
Engine Crankcase Vent System	Closed

EXHAUST SYSTEM

	Standby
Exhaust Flow – ft^3/min (m^3/min)	1246 (35.3)
Exhaust Temperature – °F (°C)	1040 (560)
Max. Exhaust Restriction – in. H_2O (kPa)	20 (5)

ELECTRICAL SYSTEM

	12 Volt
Min. Battery Capacity (CCA)—amp	1200
Starter Motor	Bosch
Power – kW	3
Alternator	
Voltage – V	14
Charge – Amp	90

FUEL SYSTEM

ECU Description	Bosch EDC7
Fuel Injection Pump	Common Rail
Governor Type	Electonic

LUBRICATING SYSTEM

Oil Pressure at Rated Speed – psi (kPa)	43.5 - 72.6 (300 - 500)
Oil Sump Capacity	
Minimum – USGal (L)	2.1 (8)
Maximum – USGal (L)	3.2 (12)
Oil System Capacity – USGal (L)	4.9 (17)

COOLING SYSTEM

	Standby
Engine Heat Rejected to Ambient – BTU/min (kW)	608 (10.7)
Engine Heat Rejected to Coolant – BTU/min (kW)	3433 (60.4)
Coolant Flow – USgal/min (L/min)	45.0 (170)
Total Engine Coolant Capacity — USGal (L)	6.7 (25.5)
Pressure Cap Setting – psi (kPa)	14.5 (100)
Max. Top Tank Temp – °F (°C)	217 (103)
Min. Coolant Fill Rate – USgal/min (L/min)	3 (12)

AIR SYSTEM

	Standby
Maximum Air Intake Restriction	
Dirty Air Cleaner – in.H_2O (kPa)	21 (5)
Clean Air Cleaner – in.H_2O (kPa)	8 (2)
Engine Air Flow – ft^3/min (m^3/min)	468 (13.2)
Air Cleaner Efficiency – %	99.9
Radiator Cooling Air Requirement – ft^3/min (m^3/min)	7950 (225)

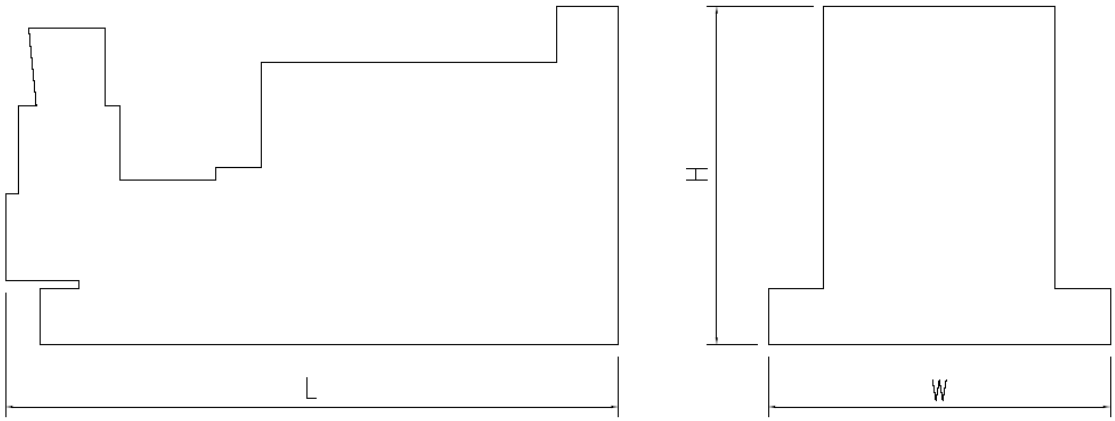
FUEL CONSUMPTION

Diesel Fuel, USGal/hr (L/Hr) at % Load	Prime	Standby
100%	10.8 (41)	11.1 (42)
75%	8.1 (30.8)	8.3 (31.5)
50%	5.7 (21.7)	5.8 (22.0)
25%	3.0 (11.5)	3.1 (11.8)

ENGINE PERFORMANCE DATA

	Prime	Standby
Rated Power – hp (kW)	209.2 (156)	230.6 (172)
Rated Speed – RPM	1800	1800
Low Idle Speed – RPM	900	900
BMEP – psi (kPa)	286(1971)	313(2160)
Altitude Capability – ft (m)	3281 (1000)	

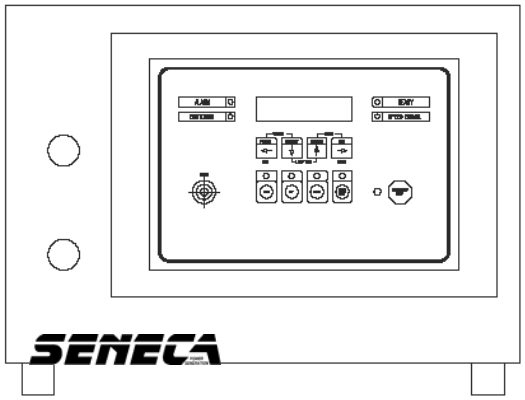
NOTE: These are provided for reference only and should not be used for planning installation. Contact your local distributor for more detailed information.



Dimensions & Weight

L x W x H, in. (mm)	93.9x30x54.8 (2385x764x1392)
Weight (max.) wet lb. (kg)	3000 (1362)

ENGINE CONTROLLER



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

Standard Features

□ Steel Base
□ 150 C Temperature Rise Alternator
□ Permanent Magnet Generator
□ Dynagen Controller, Run Relay, Failure Relay
□ Main Line Circuit Breaker
□ Block Heater, Isolation Valve
□ Battery, NOCO charger, rack and Cables
□ Residential Grade Silencer, Flex Pipe
□ Integrated Vibration Isolator Mounts
□ CSA Approval
□ Standard Factory Test
□ 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
□ Remote Radiator Configuration

Fuel System
□ Free Standing Tank (12 Hour, 24 Hour)
□ Subbase Fuel Tank (12 Hour, 24 Hour)

Electrical System
□ Battery Charger, Vulcan
□ Battery Charger, Thomson technology
□ Battery Charger, Special Requirement
□ Battery Heater
□ 125 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
□ Spring Isolators
□ Seismic Spring Isolators

Paralleling System
□ Load-Sharing Module(Basler Only)
□ Reactive Droop Compensator
□ Remote Speed Adjust Potentiometer

Governor
□ Voltage Adjust Potentiometer
□ Voltage Regulator Relocation Kit

Controller
□ Basler DGC2020
□ Thomson Technology MEC20
□ Customer Connection Kit
□ Remote Annunciator Panel
□ Dry Contact Kit (Isolated Alarm)
□ Extension Wiring Harness for Remote Mounting
□ Remote Emergency Stop

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

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