

EPA Certified / Stationary Emergency

OUTPUT POWER OPTIONS					Natural Gas				sKVA
					125°C STANDBY		105°C CONTINUOUS		
Make	Voltage	Alternator	Phase	Hertz	kW/kVA	Amps	kW/kVA	Amps	30% Voltage Dip
Marathon	600	573RSS4274	3	60	650/813	783	600/750	723	1350
	277/480	573RSL4033	3	60	650/813	978	600/750	903	1750
	120/208	573RSL4033	3	60	650/813	2258	600/750	2084	1750
	120/240	573RSL4033	3	60	650/813	1957	600/750	1806	1750
	120/240	573RSL4033	1	60	385/385	1604	374/374	1558	540
Marathon	277/480	573RSL4035	3	60	650/813	978	600/750	903	2125
	120/208	573RSL4035	3	60	650/813	2258	600/750	2084	2125
	120/240	573RSL4035	3	60	650/813	1957	600/750	1806	2125
	120/240	573RSL4035	1	60	413/413	1721	391/391	1629	690

**Engine Data**

Manufacturer	PSI
Model	31.8L
Aspiration	Charged Cooled Forced Induction
Arrangement	V-Type, 4-Cycle
Firing Order	1-8-5-10-3-7-6-11-2-9-4-12
Displacement: L (in. ³)	31.8 (1940.5)
Bore: mm (in.)	150 (5.91)
Stroke: mm (in.)	150 (5.91)
Compression Ratio	10.5:1
Gross Horsepower: Natural Gas	966
Rated RPM	1800
Governor	Isochronous

Engine Liquid Capacity

Oil system: qt. (L)	129 (122)
Cooling System Capacity: gal (L)	68.1 (257.6)

Engine Electrical

Electric Volts: DC	24
Cold Cracking Amps	2200
Battery(s) Required	2

Fuel System

Fuel Type	Natural Gas
Fuel Supply Inlet:	3" NPT
Fuel Supply Pressure: in. H ₂ O (kPa)	
Natural Gas	7-11 (1.74-2.74)

Air Requirements

Air Filter(s) Type	Dry
Air Flow: CFM (m ³ /min)	65100 (1843)
Max Air Intake Restriction: in. H ₂ O (kPa)	
Clean	5.00 (1.24)
Dirty	15.00 (3.74)
Combustion Air: CFM (m ³ /min)	1396 (40)

Exhaust System

Gas Flow: CFM (m ³ /min)	6396 (2901)
Max Exhaust Back Pressure: in. H ₂ O (kPa)	40.9 (10.2)

Fuel Consumption Natural Gas - 130°C

At 100% of Power Rating: lb/hr (kg/hr)	357 (162)
At 75% of Power Rating: lb/hr (kg/hr)	278 (126)
At 50% of Power Rating: lb/hr (kg/hr)	200 (91)
At 25% of Power Rating: lb/hr (kg/hr)	123 (56)

Cooling System

Heat Rejection per CAC: kW (BTUM)	73 (4169)
Heat Rejection to Coolant: kW (BTUM)	599 (34074)
Coolant Flow: gal/min (L/min)	436 (1650)

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 three-phase units are rated at 0.8 power factor. All single-phase units are rated at 1.0 power factor.

125° RATINGS: 125° apply 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.

105° RATINGS: 105° ratings apply to installations where utility power is unavailable or unreliable. At varying load the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528/1, overload power in accordance with ISO-3046/1, BS5514, AS2789, and DIN 6271. For limited running time and base load ratings consult the factory. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.

Alternator Data

Manufacturer	Marathon
Type	PMG
Insulation NEMA Rise/Temp	NEMA H/125°C
Hertz	60
Phase	3
RPM	1800
Leads	12
Amortisseur Windings	Full
CFM Cooling Required	1400
Voltage Regulator	PM500
Sensing	Three Phase
Voltage Regulation, No Load - Full Load	0.25%

Optional 0.25% Regulation DVR2000E+ Available

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



DGC2020 Digital Controller

- Integrated engine-genset control, protection, and metering
- Microprocessor allows for exact measurement, setpoint adjustment, and timing functions
- Front panel 3 position controls and indicators enable quick and simple operation
- Emergency stop push button and an Alarm Horn with silence button
- A wide temperature-range liquid crystal display (LCD) with backlighting
- NFPA-110 compliance with the RDP-110 (Remote Display Panel) simplifies emergency standby applications
- SAE J1939 Engine ECU communications
- Remote RS-485 communications for Optional RDP-110 Remote Annunciator
- 4 programmable contact inputs and 10 contact outputs (2 ADC rated)
- Modbus Communications with RS-485, Battery Backup for Real Time Clock, UL recognized, CSA certified, CE approved
- IP 54 Front Panel rating with integrated gasket and NFPA 110 Level 1 Compatible.
- Manual Override Keyswitch



Standard Features:

Warranty

2 Year Standard

5 Year Comprehensive

- Heavy Duty Steel Base
- Vibration Isolators
- Oil Drain Valve with Extension
- Battery Rack & Cables
- High Ambient Unit Mounted Radiator
- Battery Charging Alternator
- Factory Powder Coating
- Factory Test
- Owner's Manual

Controller Options

DGC-2020HD Controller

Fiber Optic Ethernet (DGC-2020HD)

RS-232 Port & Generator Protection (DGC-2020)

Flush or Surface Mount Remote Annunciator

Remote Mount Break Glass E-Stop Switch

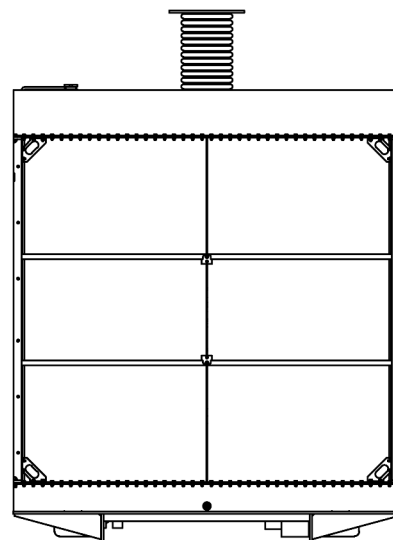
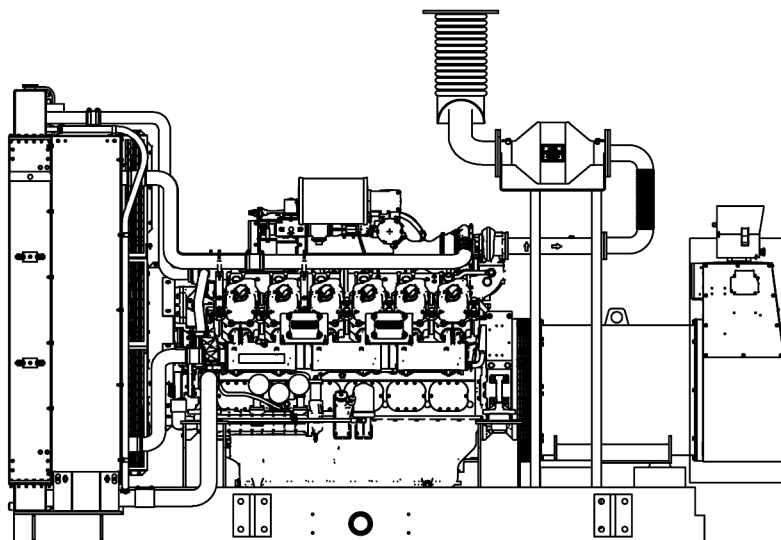
Miscellaneous Options:

- Battery Charger
- Coolant Drain Kit
- Block Heater
- Line Circuit Breaker
- Pad Type Battery Heater
- Battery Heater Blanket w/Thermostat
- Oil Pan Heater
- Generator Strip Heater

Open Unit

Options:

- Radiator Duct Flange
- Flex Exhaust
- Critical Silencer
- Custom Enclosure



**Note: The above drawings are provided for reference only and should not be used for planning installation.
Contact your local distributor for more information.**