TG150





EPA Certified / Stationary Emergency

C	OUTPUT I	POWER OPT	IONS			al Gas DBY RATING		apor DBY RATING	s KVA
Make	Voltage	Alternator	Phase	Hertz	kW/kVA	Amps	kW/kVA	Amps	30% Voltage Dip
Marathon	277/480	431CSL6202	3	60	150/188	226	137/171	206	453
	120/208	431CSL6202	3	60	150/188	521	137/171	476	340
	120/240	431CSL6202	3	60	150/188	452	137/171	412	340
	120/240	431CSL6202	1	60	121/121	504	121/121	504	108
	120/240	431PSL6224	1	60	150/150	625	137/137	571	195
Marathon	277/480	431CSL6204	3	60	150/188	226	139/174	209	519
	120/208	431CSL6204	3	60	150/188	521	139/174	483	390
	120/240	431CSL6204	3	60	150/188	452	139/174	418	390
	120/240	431CSL6204	1	60	135/135	563	135/135	563	136
Stamford	277/480	UCI274G311	3	60	150/188	226	137/171	206	730
	120/208	UCI274G311	3	60	150/188	521	137/171	476	575
	120/240	UCI274G311	3	60	150/188	452	137/171	412	575
	120/240	UCI274G311	1	60	123/123	513	123/123	513	383
	120/240	UCI274G06	1	60	150/150	625	137/137	571	510



Engine Data

Manufacturer	PSI
Model	8.8L
Aspiration	Turbocharged
Arrangement	V-8, 4-Cycle
Firing Order	1-8-7-2-6-5-4-3
Displacement: L (in.3)	8.8 (535)
Bore: mm (in.)	110.5 (4.35)
Stroke: mm (in.)	114.3 (4.50)
Compression Ratio	10.1:1
Gross Horsepower: Natural Gas	261.5
LP Vapor	230.1
Rated RPM	1800
Governor	Isochronous
Speed Regulation	±0.5%

Engine Liquid Capacity

Oil system: qt. (L)	7.57 (8.00)
Cooling System Capacity: gal (L)	3.62 (13.7)

Engine Electrical

Electric Volts: DC	12
Cold Cracking Amps	650
Battery(s) Required	1

Fuel System

Fuel Type	Natural Gas, LP Vapor or Duel Fuel			
Fuel Supply Inlet:				
Natural Gas	1.25" NPT			
LP Vapor	1.25" NPT			
Fuel Supply Pressure: in. H₂O (kPa)				
Natural Gas	7-11 (1.74-2.74)			
LP Vapor	5-11 (1.24-2.74)			

Filters and Quantity

Air Cleaner Quantity	1
Oil Filter(s) Quantity	1

Air Requirements

Air Filter(s) Type	Dry
Air Flow: CFM (m³/min)	12,000 (340)
Max Air Intake Restriction: in. H₂O (kPa)	
Clean	3.00 (1.49)
Dirty	13.00 (3.24)
Combustion Air: CFM (m³/min)	364.6 (10.3)

Exhaust System

Gas Temperature: °F (°C)	1200 (649)
Gas Flow: CFM (m³/min)	1177.5 (33.3)
Max Exhaust Back Pressure: in. H ₂ O (kPa	a) 40.9 (10.2)

Cooling System

Heat Rejection to Ambient: kW (BTUM)	24.9 (1476)
Heat Rejection to Coolant: kW (BTUM)	88 (5021)
Coolant Flow: gal/min (L/min)	33 (125)

Fuel Consumption Natural Gas - 130°C

At 100% of Power Rating: CFH (m³/hr)	1965 (55.7)
At 75% of Power Rating: CFH (m³/hr)	1529 (43.3)
At 50% of Power Rating: CFH (m³/hr)	1102 (31.2)
At 25% of Power Rating: CFH (m³/hr)	688 (19.5)

Fuel Consumption LP Vapor - 130°C

At 100% of Power Rating: CFH (m³/hr)	713 (20.2)
At 75% of Power Rating: CFH (m³/hr)	547 (15.5)
At 50% of Power Rating: CFH (m³/hr)	399 (11.3)
At 25% of Power Rating: CFH (m³/hr)	254 (7.2)

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 in 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.

AYLOR POWER SYSTEMS

Alternator Data

Manufacturer	Marathon
Туре	PMG
Insulation NEMA Rise/Temp	NEMA H/125°C
Hertz	60
Phase	3
RPM	1800
Leads	12
Amortisseur Windings	Full
CFM Cooling Required	1280
Voltage Regulator	PM500
Sensing	Three Phase
Voltage Regulation, No Load - Full Loa	nd 0.5%

Optional 0.25% Regulation DVR2000E+ Available

Alternator Data

Manufacturer	Stamford
Туре	PMG
Insulation NEMA Rise/Temp	NEMA H/125°C
Hertz	60
Phase	3
RPM	1800
Leads	12
Amortisseur Windings	Full
CFM Cooling Required	1308
Voltage Regulator	MX341
Sensing	Single Phase
Voltage Regulation, No Load - Full Loa	d 1.0%





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

Features

- BS EN 60034, BS5000, VDE 0530, NEMA MG1-32, IEC34, CSA C22.2-100, and AS1359 complaint
- IP23 enclosure
- Dynamically balanced to exceed BS6861:Part 1 Grade 2.5 vibration standard
- Quality assurance to BS EN ISO 9001
- Self-ventilated and drip proof construction
- Two-thirds pitch stator and skewed rotor
- Heavy duty bearings
- Fully guarded
- Overexcitation protection
- Under frequency protection
- Analog input
- · Overvoltage protection
- Paralleling compatible
- Single-phase sensing

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
- 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, HALT (Highly Accelerated Life Tests) tested
- IP 54 Front Panel rating with integrated gasket and NFPA 110 Level 1 Compatible.
- Manual Override Keyswitch

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
- $\bullet \ \ \mathsf{LED} \ \mathsf{Status} \ \mathsf{Lights:Low} \ \mathsf{Oil} \ \mathsf{Pressure}, \ \mathsf{High} \ \mathsf{Temperature}, \ \mathsf{Overcrank}, \ \mathsf{Overspeed}, \ \& \ \mathsf{Engine} \ \mathsf{Start}$

standard features and options



Warranty

2 Year Standard

5 Year Comprehensive

Standard Features:

- · 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

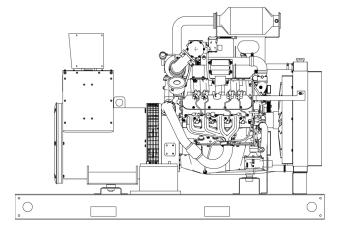
Narrow Skid Base Open Unit

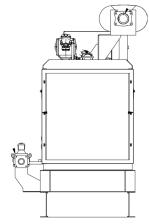
Options:

- Radiator Duct Flange
- Flex Exhaust
- Critical Silencer
- Wide Skid Base

OVERALL SIZE: 98"L x 43"W x 63"H Approximate Weight: 3,000 lbs.

Note: Dimensions and weights reflect standard open unit with no options and are subject to change.





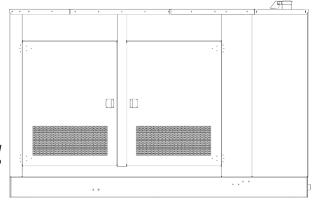
Standard Enclosed Unit

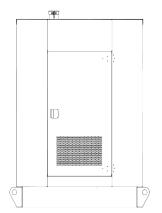
Options:

- Sound Attenuated Enclosure
- Load Center, Lights & GFI Receptacle

OVERALL SIZE: 128"L x 54"W x 75"H Approximate Weight: 4,500 lbs.

Note: Dimensions and weights reflect standard enclosed unit with no options and are subject to change.





Note: The above drawings are provided for reference only and should not be used for planning installation.

Contact your local distributor for more information.