# **TG650**





**EPA Certified / Stationary Emergency** 

	EPA Certified / Stationary Emergence					mergency	
OUTPUT POWER OPTIONS				Natural Gas STANDBY RATING		sKVA	
Make	Voltage	Alternator	Phase	Hertz	kW/kVA	Amps	30% Voltage Dip
Marathon	600	573RSS4274	3	60	650/813	783	1350
	277/480	573RSL6433	3	60	650/813	978	2300
	120/208	573RSL6433	3	60	650/813	2258	1730
	120/240	573RSL6433	3	60	650/813	1957	1730
Marathon	277/480	573RSL6435	3	60	650/813	978	2850
	120/208	573RSL6435	3	60	650/813	2258	2150
	120/240	573RSL6435	3	60	650/813	1957	2150



**Engine Data** 

Manufacturer	PSI	
Model	31.8L	
Aspiration	Turbocharged	
Arrangement	V-12, 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.)	150.00 (5.91)	
Stroke: mm (in.)	150.00 (5.91)	
Compression Ratio	10.5:1	
Gross Horsepower	966	
BMEP: psi (kPa)	219.00 (1509.95)	
Rated RPM	1800	
Governor	Isochronous	
Speed Regulation	±0.50%	

**Engine Liquid Capacity** 

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

**Engine Electrical** 

Electric Volts: DC	24	
Cold Cranking Amps	1100	
Battery(s) Required	2	

**Fuel System** 

Fuel Supply Size	3.00" NPT
Supply Pressure: in. H₂O (kPa)	7-11 (1.74-2.74)

## **Air Requirements**

Air Filter(s) Type	Dry	
Combustion Air Flow: CFM (m³/min)	1320 (37)	
Maximum Air Intake Restriction		
Clean: in. H₂O (kPa)	3.00 (1.24)	
Dirty: in. H₂O (kPa)	15.00 (3.74)	
Radiator Air Flow: CFM (m³/min)	41,200 (1167)	

# **Exhaust System**

Gas Temperature: °F (°C)	1183 (639)	
Gas Flow: CFM (m³/min)	4354 (123)	
Max Back Pressure: in. H₂O (kPa)	40.9 (10.2)	

## Filters and Quantity

Air Cleaner Quantity	1
Oil Filter(s) Quantity	1

## **Fuel Consumption**

At 100% of Power Rating: CFH (m³/hr)	7983 (226)
At 75% of Power Rating: CFH (m³/hr)	6202 (176)
At 50% of Power Rating: CFH (m³/hr)	4478 (127)
At 25% of Power Rating: CFH (m³/hr)	2756 (78)

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.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		
Туре	PMG		
Insulation Class	NEMA N		
Temperature Rise	125°C Standby		
Hertz	60		
RPM	1800		
Amortisseur Windings	Full		
CFM Cooling Required	1340		
Voltage Regulator	DVR2400	PM500	
Sensing	Three Phase	Three Phase	
Voltage Regulation	0.25%	0.25%	

#### **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

#### **Control Panels**



#### DeepSea 7310 MKII

Simultaneous Use of RS232 & RS485 Modbus RTU Support Fully Configurable Using USB, RS232 & RS485 IP65 Rating 6 Programmable Inputs & 8 Outputs UL & cUL Listed and CE Certified



#### **Basler DGC2020**

SAE J1939 Engine ECU Communications 4 Programmable Inputs & 10 Outputs Modbus Communications With RS485 UL Recognized, CSA & CE Certified IP 54 Front Panel Rating NFPA 110 Level 1 Compatible Manual Override Keyswitch DGC2020HD Variant Available



#### **Taylor Analog**

Automatic CANBUS Engine Control
Gauge Zeroing on Shutdown
Auto-Off-Manual Control Switch
Oil Pressure, Water Temperature, Battery Voltage and RPM Gauges
AC Voltage, Frequency, Percent of Load, and Run-Time Metering
LED Status Lights



## Warranty

2 Year Standard

5 Year Comprehensive

#### Standard Features:

Heavy Duty Steel Base

Vibration Isolators

Oil Drain Valve with Extension

Coolant Drain Kit

High Ambient Unit Mounted Radiator

Battery Charger

**Block Heater** 

**Factory Powder Coating** 

Factory Load Test

Owner's Manual

### **Controller Options**

DGC2020HD Controller

Fiber Optic Ethernet (DGC2020HD)

RS-232 Port & Generator Protection (DGC2020)

Flush or Surface Mount Remote Annunciator

Remote Mount Break Glass E-Stop Switch

## **Miscellaneous Options:**

Generator Strip Heater

Pad Type Battery Heater

Spring Isolators

Battery Heater Blanket

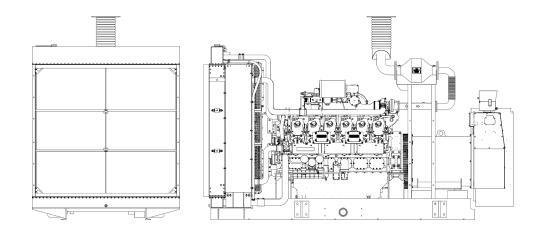
Line Circuit Breaker

Oil Pan Heater

# **Open Unit**

#### Options:

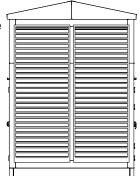
- · Radiator Duct Flange
- Flex Exhaust
- Critical Silencer

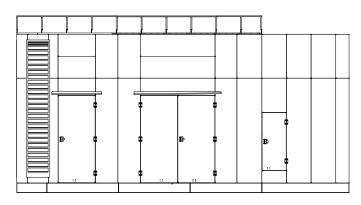


#### Standard Enclosed Unit

#### Options:

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





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

Contact your local distributor for more information.