# **TD1600**





#### **EPA Certified / Stationary Emergency**

El A del tillea / Stational y Ellier genoy							
OUTPUT POWER OPTIONS				STANDBY RATING		sKVA	
Make	Voltage	Alternator	Phase	Hertz	kW/kVA	Amps	30% Voltage Dip
Stamford	600	S7L1D-D4-07	3	60	1600/2000	1927	3900
	277/480	S7L1D-D4-312	3	60	1600/2000	2408	4100
Marathon	600	743RSS4290	3	60	1600/2000	1927	4900
	277/480	743RSL4052	3	60	1600/2000	2408	5700
	120/208	743RSL4052	3	60	1600/2000	2779	4675
	120/240	743RSL4052	3	60	1480/1850	2814	4675
Marathon	277/480	744RSL4054	3	60	1600/2000	2408	6600
	120/208	744RSL4054	3	60	1600/2000	2779	5800
	120/240	744RSL4054	3	60	1590/1988	3023	5800





# **Engine Data**

Manufacturer	Mitsubishi
Model	S16R-Y2PTAW-1
Aspiration	Turbocharged
EPA Tier	2
Charge Air Cooling System	Inter-Cooler
Arrangement	V-16, 4-Cycle
Displacement: L (in.³)	65.37 (3989.00)
Bore: mm (in.)	170.00 (6.69)
Stroke: mm (in.)	180.00 (7.09)
Compression Ratio	14.5:1
BMEP: psi (kPa)	259.0 (1785.7)
Horsepower	2279
Rated RPM	1800
Governor	Isochronous
Speed Regulation	±0.25%

# Engine Liquid Capacity

Oil System: qt. (L)	243 (230)
Cooling Capacity: gal (L)	44.9 (170.0)

#### **Engine Electrical**

Electric Volts: DC	24	
Cold Cranking Amps	1100	
Battery(s) Required	4	

# **Fuel System**

Fuel Injection Type	Mitsubishi PS8
Max Suction Head: in. H <sub>2</sub> O (kPa)	40.83 (20.16)
Recommended Fuel	Low Sulfur Diesel

#### **Air Requirements**

Air Filter(s) Type	Dry
Combustion Air Flow: CFM (m³/min)	5,932 (168)
Maximum Air Intake Restriction	
Clean: in. H₂O (kPa)	15.70 (3.91)
Dirty: in. H₂O (kPa)	25.00 (6.23)
Radiator Air Flow: CFM (m³/min)	75,008 (2124)
Exhaust System	
Gas Flow: CFM (m³/min)	15,642 (443)
Max Back Pressure: in. H₂O (kPa)	23.60 (5.88)
Sound Level	
Open Unit Without Exhaust: dBA 3.2 ft (1M)	112
Filters and Quantity	
Air Cleaner Quantity	4
Oil Filter(s) Quantity	2
Fuel Filter(s) Quantity	2
_	

# **Fuel Consumption**

At 100% of Power Rating: gal/hr (L/hr)	128.7 (487.0)
At 75% of Power Rating: gal/hr (L/hr)	94.1 (356.0)
At 50% of Power Rating: gal/hr (L/hr)	63.7 (241.0)
At 25% of Power Rating: gal/hr (L/hr)	35.1 (133.0)

#### **Cooling System**

Heat Rejection to Air Cooler: kW (BTUM)	636 (36,167)
Heat Rejection to Coolant: kW (BTUM)	636 (36,167)
Heat Rejection to Ambient: kW (BTUM)	147 (8,346)
Coolant Flow: gal/min (L/min)	489 (1850)

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	Stamford	
Туре	PMG	
Insulation Class	NEMA H	
Temperature Rise	125°C Standby	
Hertz	60	
RPM	1800	
Amortisseur Windings	Full	
CFM Cooling Required	7300	
Voltage Regulator	MX341	MX322
Sensing	Single Phase	Three Phase
Voltage Regulation	1.0%	0.50%

#### **Alternator Data**

Manufacturer	ufacturer Marathon	
Туре	PN	ЛG
Insulation Class	NEN	/IA N
Temperature Rise	125°C \$	Standby
Hertz	60	
RPM	1800	
Amortisseur Windings	Full	
CFM Cooling Required	3430	
Voltage Regulator	DVR2400	PM500
Sensing	Three Phase	Three Phase
Voltage Regulation	0.25%	0.25%

# **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

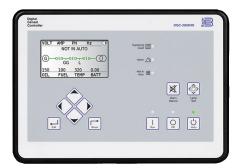
SAE J1939 Engine ECU Communications 4 Programmable Inputs & 10 Outputs Modbus Communications With RS485 UL Recognized, CSA & CE Certified IP 54 Front Panel Rating NFPA 110 Level 1 Compatible Manual Override Keyswitch DGC2020HD Variant Available

#### 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

#### 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



#### Basler DGC2020HD

SAE J1939 Engine ECU Communications 16 Programmable Inputs & 12 Outputs Load Sharing of kW and kVAR over Ethernet UL Recognized, CSA & CE Certified IP 54 Front Panel Rating NFPA 110 Level 1 Compatible Optional Color Touch Screen



# standard features and options

# **Standard Features:**

Warranty

**Open Unit** Options:

 Radiator Duct Flange Critical Silencer Sub-Base Fuel Tank

2 Year	Standard
5 Year	Comprehensive

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**

Fiber Optic Ethernet (DGC2020HD) RS-232 Port & Generator Protection (DGC2020)

Flush or Surface Mount Remote Annunciator

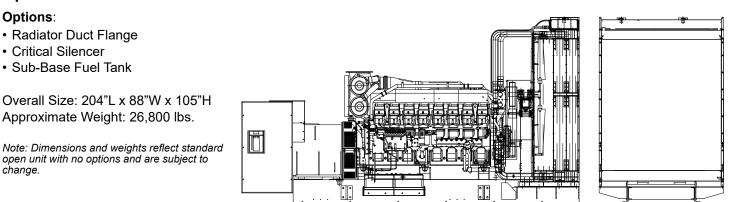
Remote Mount Break Glass E-Stop Switch

# **Miscellaneous Options:**

**Generator Strip Heater** Spring Isolators

Line Circuit Breaker

Pad Type Battery Heater **Battery Heater Blanket Oil Pan Heater** 

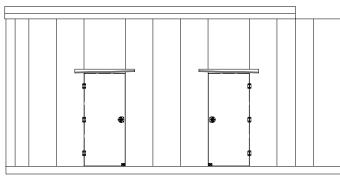


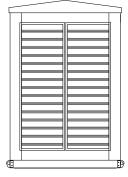
# Standard Enclosed Unit

#### Options:

change.

- Sound Attenuated Enclosure
- · Load Center, Lights & GFI Receptacle
- Sub-Base Fuel Tank





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