# **TD100**



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OUTPUT POWER OPTIONS			125°C		105°C		s <b>KVA</b>		
)	,01101	I OWEN OF I	10113		STANDBY	RATING	CONTINUO	US RATING	SILVA
Make	Voltage	Alternator	Phase	Hertz	kW/kVA	Amps	kW/kVA	Amps	30% Voltage Dip
Marathon	600	362PSL1636	3	60	100/125	120	90/113	108	378
	277/480	362CSL1606	3	60	100/125	151	90/113	135	378
	120/208	362CSL1606	3	60	100/125	347	90/113	313	284
	120/240	362CSL1606	3	60	100/125	301	90/113	271	284
	120/240	362CSL1606	1	60	79/79	329	76/76	317	127
	120/240	363CSL1617	1	60	100/100	417	90/90	375	310
Marathon	277/480	363CSL1607	3	60	105/131	158	95/118	143	473
	120/208	363CSL1607	3	60	105/131	365	95/118	330	355
	120/240	363CSL1607	3	60	105/131	316	95/118	286	355
	120/240	363CSL1607	1	60	97/97	404	90/90	375	153
Stamford	600	UCI274D17	3	60	100/125	120	90/113	108	545
	277/480	UCI274D311	3	60	100/125	151	90/113	135	520
	120/208	UCI274D311	3	60	100/125	347	90/113	313	406
	120/240	UCI274D311	3	60	100/125	301	90/113	271	406
	120/240	UCI274D311	1	60	79/79	329	72/72	300	272
	120/240	UCI274D06	1	60	100/100	417	87/87	363	355

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# **Engine Data**

Manufacturer	Perkins
Model	1104D-E44TAG2
Aspiration	Turbocharged
EPA Tier	3
Charge Air Cooling System	Air-to-Air
Arrangement	Vertical Inline, 4-Cycle
Firing Order	1-3-4-2
Displacement: L (in.3)	4.40 (268.50)
Bore: mm (in.)	105.00 (4.13)
Stroke: mm (in.)	127.00 (5.00)
Compression Ratio	16.2:1
BMEP: psi (kPa)	256.86 (1771.00)
Net Horsepower	148.74
Rated RPM	1800
Governor	Isochronous
Speed Regulation	±3.0%

# **Engine Liquid Capacity**

Oil System: qt. (L)	8.45 (8.00)
Cooling System Capacity: gal (L)	4.49 (17.00)

# **Engine Electrical**

Electric Volts: DC	12
Cold Cracking Amps	925
Battery(s) Required	1

## **Fuel System**

Fuel Injection Type	Direct
Fuel Pump Rate: gal/hr (L/hr)	34.34 (130.00)
Pump Maximum Suction Head: in. H <sub>2</sub> O (kPa)	68.23 (17.00)
Pump Maximum Pressure Head: in. H <sub>2</sub> O (kPa)	40.13 (10.00)
Max Fuel Supply Restriction: in. H₂O (kPa)	160.53 (40.00)
Max Fuel Return Restriction: in. H₂O (kPa)	200.66 (50.00)
Recommended Fuel	Low Sulfur Diesel

# **Air Requirements**

Air Filter(s) Type	Dry	
Combustion Air Flow: CFM (m³/min)	300.18 (8.50)	
Maximum Air Intake Restriction		
Clean: in. H₂O (kPa)	20.07 (5.00)	
Dirty: in. H₂O (kPa)	32.11 (8.00)	

# **Exhaust System**

Gas Temperature: °F (°C)	942.8 (506.0)
Gas Flow: CFM (m³/min)	706.3 (20.0)
Max Exhaust Back Pressure: in. H <sub>2</sub> O (kPa)	60.20 (15.00)
Exhaust Outlet Size: in. (mm)	2.52 (64.00)

#### Sound Level

# **Filters and Quantity**

Air Cleaner Quantity	1
Oil Filter(s) Quantity	1
Fuel Filter(s) Quantity	2

# Fuel Consumption - 125°C

At 100% of Power Rating: gal/hr (L/hr)	7.34 (27.77)
At 75% of Power Rating: gal/hr (L/hr)	5.82 (22.04)
At 50% of Power Rating: gal/hr (L/hr)	4.25 (16.07)
At 25% of Power Rating: gal/hr (L/hr)	N/A

# Fuel Consumption - 105°C

At 100% of Power Rating: gal/hr (L/hr)	N/A
At 75% of Power Rating: gal/hr (L/hr)	N/A
At 50% of Power Rating: gal/hr (L/hr)	N/A
At 25% of Power Rating: gal/hr (L/hr)	N/A

# **Cooling System**

Rejection to Charge Cooler: kW (BTUM)	18.0 (1023.6)
Rejection to Coolant & Oil: kW (BTUM)	61.0 (3469.0)
Coolant Flow: gal/min (L/min)	44.7 (169.0)

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.

# POWER SYSTEMS R

#### **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	700
Voltage Regulator	PM500
Sensing	Three Phase
Voltage Regulation, No Load - Full Loa	d 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
- LED Status Lights: Low Oil Pressure, High Temperature, Overcrank, Overspeed, & Engine 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

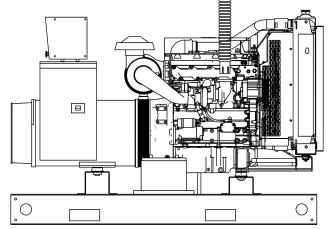
# Narrow Skid Base Open Unit

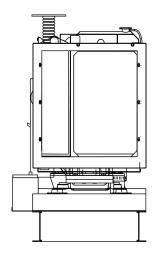
#### **Options:**

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

OVERALL SIZE: 81"L x 30"W x 55"H Approximate Weight: 2,200 lbs.

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





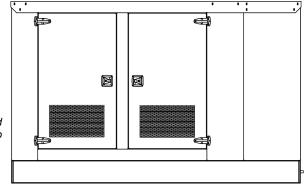
#### **Standard Enclosed Unit**

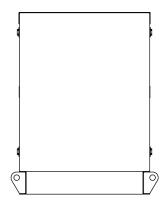
#### Options:

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

OVERALL SIZE: 102"L x 46"W x 64"H Approximate Weight: 3,100 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.