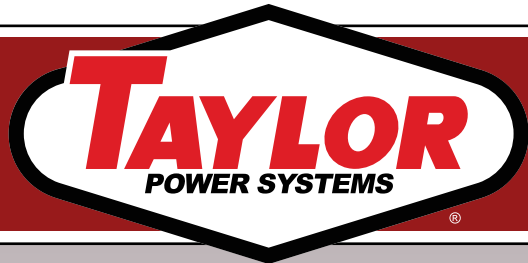


# TDS80



CONFORMS TO UL STANDARD 2200  
CERT. TO CSA STD. C22.2 NO. 100

### EPA Certified / Stationary Emergency

OUTPUT POWER OPTIONS					STANDBY RATING		sKVA
Make	Voltage	Alternator	Phase	Hertz	kW/kVA	Amps	30% Voltage Dip
Stamford	600	UCI274C17	3	60	80/100	96	445
	277/480	UCI274C311	3	60	80/100	120	420
	120/208	UCI274C311	3	60	80/100	278	349
	120/240	UCI274C311	3	60	80/100	241	349
	120/240	UCI274C06	1	60	80/80	333	263





**Engine Data**

Manufacturer	Perkins
Model	1104D-E44TAG1
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. <sup>3</sup> )	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)	212.77 (1467.00)
Net Horsepower	121.67
Rated RPM	1800
Governor	Isochronous
Speed Regulation	±0.25%

**Engine Liquid Capacity**

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

**Engine Electrical**

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

**Fuel System**

Fuel Injection Type	Direct
Fuel Pump Rate: gal/hr (L/hr)	0.57 (2.20)
Max Suction Head: in. H <sub>2</sub> O (kPa)	68.23 (17.00)
Max Pressure Head: in. H <sub>2</sub> O (kPa)	40.13 (10.00)
Max Supply Restriction: in. H <sub>2</sub> O (kPa)	160.53 (40.00)
Max Return Restriction: in. H <sub>2</sub> O (kPa)	200.66 (50.00)
Recommended Fuel	Low Sulfur Diesel

**Air Requirements**

Air Filter(s) Type	Dry
Combustion Air Flow: CFM (m <sup>3</sup> /min)	271.92 (7.70)
Maximum Air Intake Restriction	
Clean: in. H <sub>2</sub> O (kPa)	20.07 (5.00)
Dirty: in. H <sub>2</sub> O (kPa)	32.11 (8.00)
Radiator Air Flow: CFM (m <sup>3</sup> /min)	7,699 (218)

**Exhaust System**

Gas Temperature: °F (°C)	917.6 (492.0)
Gas Flow: CFM (m <sup>3</sup> /min)	632.1 (17.9)
Max Back Pressure: in. H <sub>2</sub> O (kPa)	60.20 (15.00)
Exhaust Outlet Size: in. (mm)	2.52 (64.00)

**Sound Level**

Open Unit Without Exhaust: dBA 3.2 ft (1M)	105.5
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**Filters and Quantity**

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

**Fuel Consumption**

At 100% of Power Rating: gal/hr (L/hr)	6.26 (23.69)
At 75% of Power Rating: gal/hr (L/hr)	4.95 (18.74)
At 50% of Power Rating: gal/hr (L/hr)	3.58 (13.55)
At 25% of Power Rating: gal/hr (L/hr)	N/A

**Cooling System**

Rejection to Charge Cooler: kW (BTUM)	13.9 (790.5)
Rejection to Coolant & Oil: kW (BTUM)	53.6 (3048.2)
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. 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
Type	PMG
Insulation Class	NEMA H
Temperature Rise	125°C Standby
Hertz	60
RPM	1800
Amortisseur Windings	Full
CFM Cooling Required	1463
Voltage Regulator	MX341
Sensing	Single Phase
Voltage Regulation	1.0%

## Features

- BS EN 60034, BS5000, VDE 0530, NEMA MG1-32, IEC34, CSA C22.2-100, and AS1359 compliant
- 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
- Soft start circuitry
- Overexcitation protection
- Under frequency protection
- Analog input
- Overvoltage protection

## Basler DGC2020ES Controller

- Meets NFPA-110 Level 1 (with RDP-110C Remote Annunciator)
- Oil pressure, engine temperature, fuel level, oil level, hour meter, RPM, real time clock, and battery voltage metering
- 3-Phase AC volts, amps & frequency metering
- Programmable Inputs & Outputs
- Fully potted design
- SAE J1939 CAN Bus Protocol
- Multilingual Capability



## DynaGen TG410 Controller

- Meets NFPA-110 Level 1 (with RA400 Remote Annunciator)
- Oil pressure, engine temperature, fuel level, oil level, hour meter, RPM, real time clock, and battery voltage metering
- 3-Phase AC volts, amps & frequency metering
- J1939 DTC codes with custom text
- Modbus port with galvanic isolation to connect remote annunciators
- SAE J1939 CAN Bus Protocol
- Auto start on Low Battery and other inputs



## DeepSea 6110 MKIII Controller

- Meets NFPA-110 Level 1 (with DSE2548 Remote Annunciator)
- Oil pressure, engine temperature, fuel level, oil level, hour meter, RPM, real time clock, and battery voltage metering
- 3-Phase AC volts, amps & frequency metering
- Programmable Inputs & Outputs
- Internal PLC editor
- Engine pre-heat and post-heat functions
- Fully configurable via PC using USB





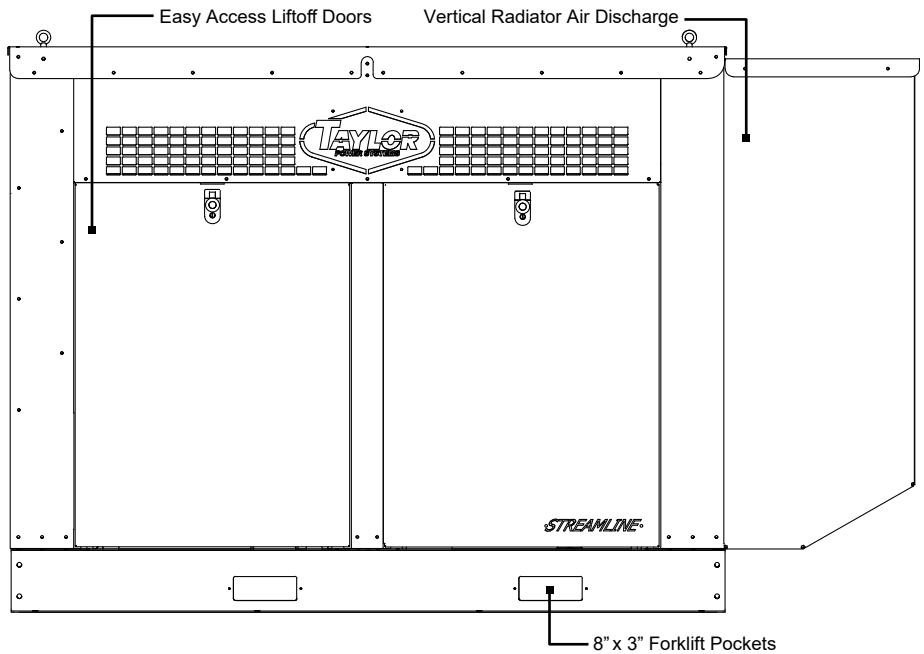
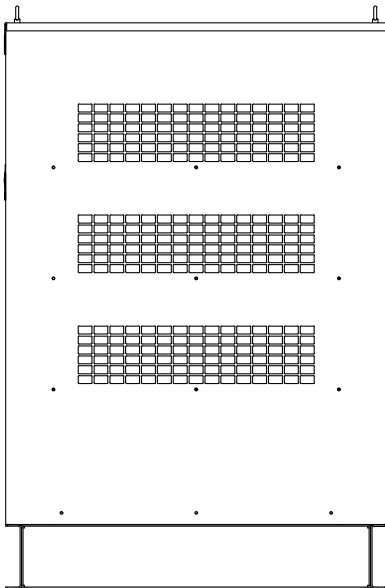
**Standard Features:**

- Heavy Duty Steel Base
- Vibration Isolators
- Battery Rack & Cables
- High Ambient Radiator
- Isochronous Governor
- Main Line Circuit Breaker
- NFPA-110 Level 1 Compliant

- Unit Mounted Emergency Stop
- Block Heater
- Battery Charger
- Factory Powder Coating
- Factory Load Test
- Owner's Manual
- Two Year Warranty

**Optional Accessories:**

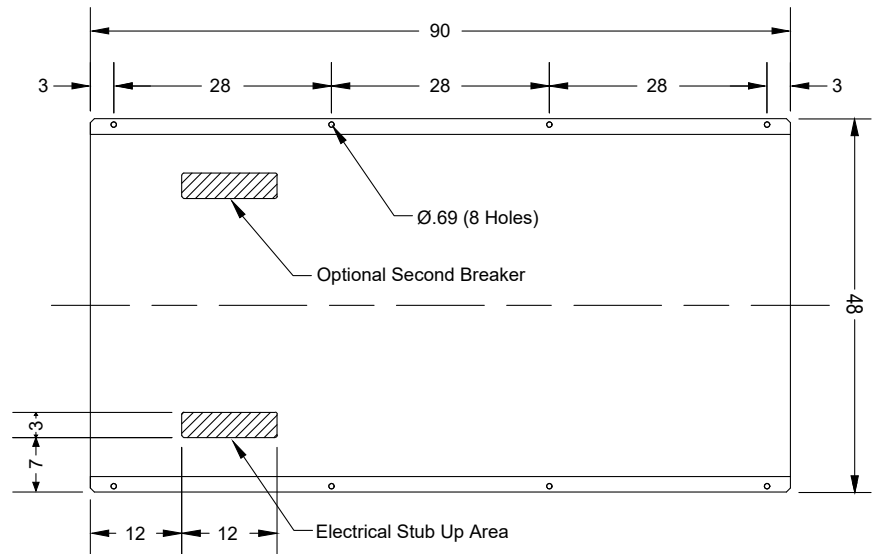
- Breaker Shunt Trip & Auxiliary Contacts
- Flush or Surface Mount Remote Annunciator
- Remote Mount Break Glass E-Stop Switch
- Automatic Transfer Switch
- Sub-Base Fuel Tank



**Sound Attenuated Enclosed Unit**

Overall Size: 115"L x 48"W x 71"H

*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.*