TGS80

TAYLOR POWER SYSTEMS

C ETL LISTED US
CONFORMS TO UL STANDARD 2200
CERT. TO CSA STD. C22.2 NO. 100

EPA Certified / Stationary Emergency

OUTPUT POWER OPTIONS					Natural Gas 125°C Standby		sKVA
Make	Voltage	Alternator	Phase	Hertz	kW/kVA	Amps	30% Voltage Dip
Stamford	277/480	UCI274C311	3	60	80/100	120	257
	120/208	UCI274C311	3	60	80/100	278	194
	120/240	UCI274C311	3	60	80/100	241	194
	120/240	UCI274C06	1	60	80/80	333	168

MADE IN USA

MISSISSIPPI

947 Industrial Park Drive • Clinton, MS 39056 • Phone (601) 922-4444 • Fax (601) 922-0800 • www.taylorpower.com

Engine Data

Manufacturer	PSI
Model	5.7L
Aspiration	Turbocharged
Arrangement	V-8, 4-Cycle
Firing Order	1-8-4-3-6-5-7-2
Displacement: L (in.^{3})	5.7 (350)
Bore: mm (in.)	101.6 (4.00)
Stroke: mm (in.)	88.4 (3.48)
Compression Ratio	9.1:1
Gross Horsepower	124.07
Rated RPM	1800
Governor	Isochronous
Speed Regulation	±0.5%

Engine Liquid Capacity

Oil system: qt. (L)	5.0 (4.7)
Engine Cooling System Capacity: gal (L)	2.1 (7.8)

Engine Electrical

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

Fuel System

Fuel Type	Natural Gas
Fuel Supply Inlet:	1.5” NPT
Fuel Supply Pressure: in. H_2O (kPa)	7-11 (1.74-2.74)

Filters and Quantity

Air Cleaner Quantity	1
Oil Filter(s) Quantity	1

Air Requirements

Air Filter(s) Type	Dry
Air Flow: CFM (m^3/min)	5,500 (156)
Max Air Intake Restriction: in. H_2O (kPa)	
Clean	3.00 (1.49)
Dirty	13.00 (3.24)
Combustion Air: CFM (m^3/min)	243.7 (6.9)

Exhaust System

Gas Temperature: °F (°C)	1200 (649)
Gas Flow: CFM (m^3/min)	786.9 (22.3)
Max Exhaust Back Pressure: in. H_2O (kPa)	40.9 (10.2)

Cooling System

Heat Rejection to Ambient: kW (BTUM)	47 (2700)
Heat Rejection to Coolant: kW (BTUM)	62 (3540)
Coolant Flow: gpm (Lpm)	38 (144)

Fuel Consumption Natural Gas

At 100% of Power Rating: CFH (m^3/hr)	1185 (33.6)
At 75% of Power Rating: CFH (m^3/hr)	981 (27.8)
At 50% of Power Rating: CFH (m^3/hr)	777 (22.0)
At 25% of Power Rating: CFH (m^3/hr)	573 (16.2)

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.

alternator and controller data

Alternator Data

Manufacturer	Stamford
Type	PMG
Insulation NEMA Rise/Temp	NEMA H/125°C
Hertz	60
Phase	3 & 1
RPM	1800
Leads	12 & 4
Amortisseur Windings	Full
CFM Cooling Required	1308
Voltage Regulator	595
Sensing	Single Phase
Voltage Regulation, No Load - Full Load	1.0%

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
- Overexcitation protection
- Under frequency protection
- Analog input
- Overvoltage protection
- Paralleling compatible
- Single-phase sensing

DynaGen TOUGH Series® 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 and internet monitoring devices
- SAE J1939 CAN Bus Protocol
- Speed control offset adjustment for electronic engines
- Auto start on Low Battery and other inputs
- Front panel trim feature for sensor adjustment
- UL Recognized

RA400 Remote Annunciator

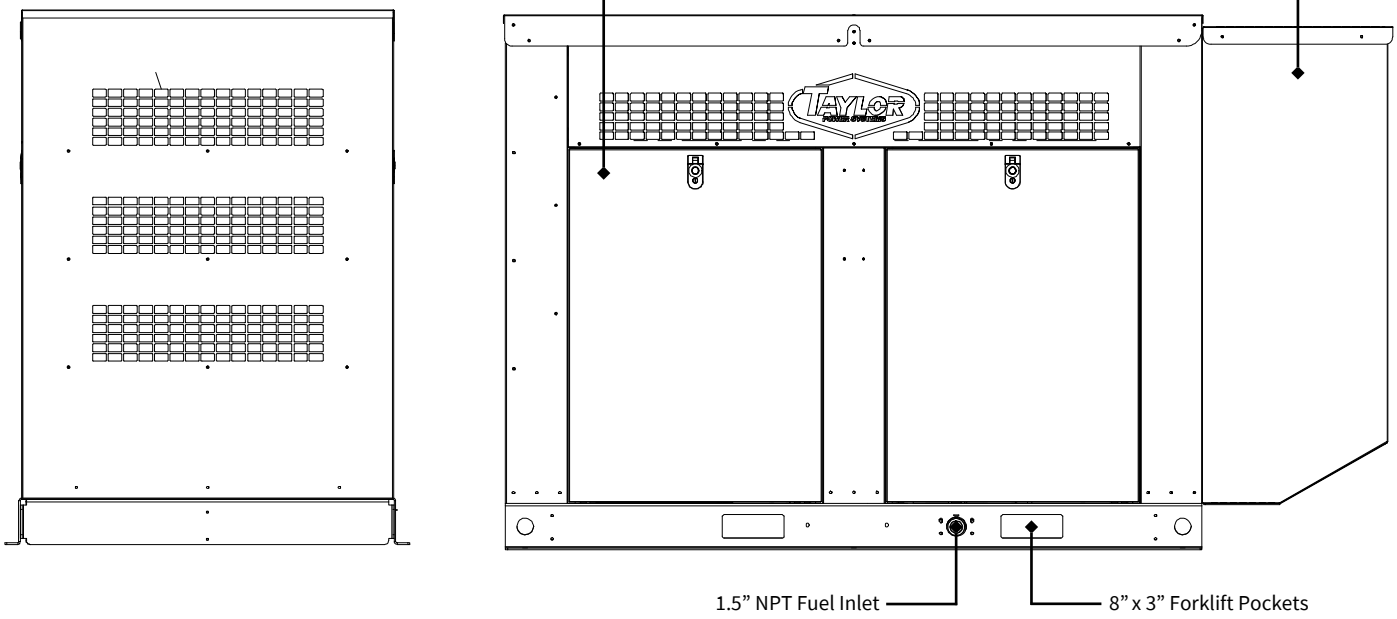
- NFPA-110, NFPA 99 & CSA 282-00 compliant
- Genset wiring up to 2800 feet
- 20 Lamp Indicator for Warnings, Status, and Failures
- 2 User configurable lamps
- Extra switched inputs for Genset Start/Stop
- Surface or flush-mounting
- 12VDC or 24DVC power input; optional 120VAC power supply available

Standard Features

- Heavy Duty Steel Base
- Vibration Isolators
- Battery Rack & Cables
- High Ambient Radiator
- Isochronous Governor
- One Step Load Acceptance
- 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

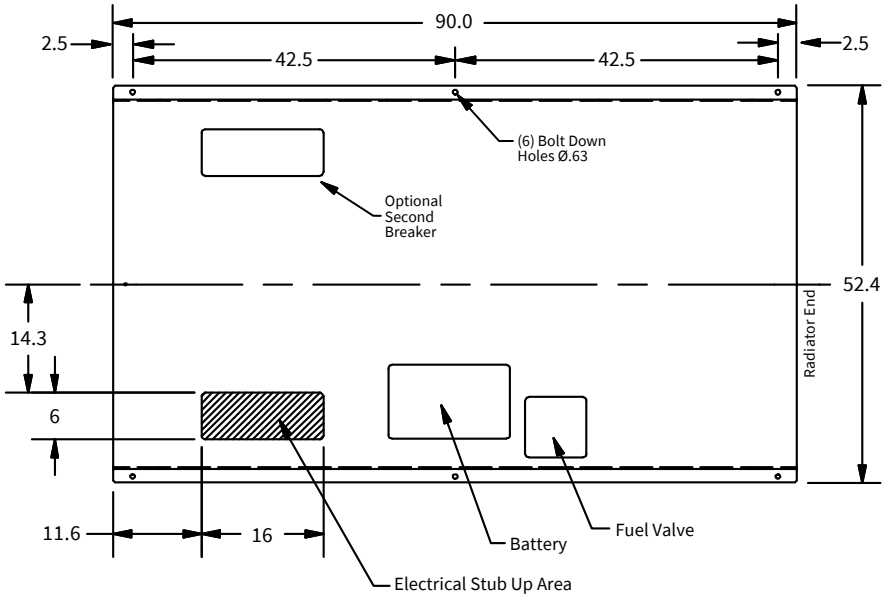
- Main Line Circuit Breaker
- Breaker Shunt Trip & Auxiliary Contacts
- Flush or Surface Mount Remote Annunciator
- Remote Mount Break Glass E-Stop Switch
- Automatic Transfer Switch



Sound Attenuated Enclosed Unit

OVERALL SIZE: 114"L x 53"W x 69"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.