

60Hz PERKINS 1204F-E44TTAG2 Tier 4 Final

DGPW 100 ST T4



Measures:

L: 2600 mm H: 1900 mm W: 1000 mm

Weight (dry):

4079 lbs / 1850 kg





60Hz



Diesel



Water cooled



Open



1800 r.p.m.



CSA Approved or Equivalent

Genset General Description

> Open skid gensets with controllers to protect equipment and allow for manual or auto start up signals.

General Technical Data			
Engine	PERKINS 1204F-E44TTAG2		
	240/120V	Wdg.	STAMFORD UCI274D-
		.06	w06
Alternators	208/120V	Wdg.	STAMFORD UCI274D
Alternators		311	STAIVII OND OCIZ74D
	600/347V	Wdg.	STAMFORD UCI274D
		17	
Performance Class	G2		
Frequency	60Hz		
	240/120V		DSE 7320 MKII
Control Panel	208/120V		DSE 7320 MKII
	600/347V		DSE 7320 MKII
Noise level (dBA@7m)			

Voltage (v)	PRP (KW)	ESP (KW)	PRP/ESP (A)
240/120V	90	98	371/408
208/120V	100	110	345/381
600/347V	97	106	116/128

PRP: Continuous power ("Prime Power") ISO 8528-1 standard. ESP: Emergency power ("Emergency Standby Power") ISO8528-1 standard.

V.0-2021 · Last update: 01/21/2021 | Page 1



60Hz PERKINS 1204F-E44TTAG2 Tier 4 Final

2 Engine Specifications

> PERKINS 1204F-E44TTAG2 Diesel engine, inline 4-cylinders, 4-stroke. Turbocharged aspiration, air intake system. Electronic regulation. Complying with Tier 4 Final emissions.

Engine General Data			
Manufacturer/Model	PERKINS 1204F-E44TTAG2	Number of Cylinders	4
R.P.M.	1800	Engine Capacity	4,4
Max. Power (kWm) (net)	121	Cooling System	Water cooled
Power PRP (Kwm) (net)	109,4	Regulation Type	Electronic
Fuel	Diesel	Engine Type/Injection/ Suction	Diesel /Direct/ Turbocharged

2.1 Fuel Feed System

Direct injection system, fuel filter included that prevents the passage of particles, original parts from the engine manufacturer.

0% PRP
% PRP

2.2 Cooling System

> Cooling by fully distributed coolant in a closed circuit driven by a pump activiated by the engine.

Tropicalized radiator. Original parts from the engine manufacturer.



2.3 Lubricating System

Lubrication system is driven by the crankshaft driven pump. Filter on top with full flow cartridge inserted, front crankcase. Original parts from the engine manufacture.

Total Oil Capacity 9,4L

V.0-2021 · Last update: 01/21/2021 | Page 2



60Hz PERKINS 1204F-E44TTAG2 Tier 4 Final

2.4 Air Intake System

Direct air intake system including two-stage filter. Original parts from the engine manufacturer.

Combustion Air Volume 8,7 m³/min

2.5 Start System

> Start system by electric motor. battery (without maintenance) with disconnector and charging alternator driven by the starter motor 12V, original parts from the engine manufacturer.

Number of Batteries

1

Battery Features

31P-925

Starting Voltage

2V

2.6 Exhaust System

Exhaust System	
Exhaust Gas Volume	16,7 m³/min
Exhaust Gas Temperature	473 °C
Exhaust External Diameter	3" (76 mm)
Max. Exhaust Backpressure	7kPa

Alternator Specifications

Alternator STAMFORD 4-poles, brushless, alternator with class H insulation wound at 2/3 pitch and self-excited automatic voltage regulator (AVR).

Alternator General Data	240/120V	208/120V	600/347V
Brand/Model	STAMFORD UCI274D-w06	STAMFORD UCI274D	STAMFORD UCI274D
Winding No.	.06	311	17
Voltage Regulator AVR	SX460	SX460	SX460
Voltage Regulator	0,01	0,01	0,01
ESP Power Rating 40°C (kW)	110	110	124
PRP Power Rating 40°C (kW)	100	105,04	117,04
Number of Phases	1	3	3
Power Factor (cos φ)	1	0,8	0,8
Efficiency at 100% Load	86,1%	90,5%	91,3%
Efficiency at 110% Load	86,1%	90,5%	91,3%

The alternator complies with the following standards:

- Class H temperature rise 125°C (257°F), continuous rating.
- Class H temperature rise 150°C (302°F), standby rating.
- AS 1359
- IEC 34-1
- BS EN 60034-1
- VDE 0530
- BS 5000
- · CAN/CSA-C22.2-100
- NEMA MG1-32

Low wave distortion: THD (100% load) = 2%, THF < 2%, Complying with EN61000-6-3, EN61000-6-2 standards on radio interference.

V.O-2021 · Last update: 01/21/2021 | Page 3



60Hz PERKINS 1204F-E44TTAG2 Tier 4 Final

4

Bench Specifications

> Engine and alternator mounted on a high strength steel frame and painted with electrostatic epoxy polyester powder paint. Frame is tested in saline mist chamber to conform to ASTM B-117-09 for 500 hours. Engine and Alternator are mounted on rubber isolators to help dampen vibration while running.



5

Control Panel

The control panel protects the engine and generator and allows for manual and automatic control of the genset.



5.1 Main Line Breaker

Main line circuit breaker: A thermo-magnetic breaker provides protection against short circuits and overloads. Breakers are 80% rated. 100% rated breakers are available on request.

240/120

400 Amps, Adj.

208/120

400 Amps. Adi.

600/347

25 Amps. Fixed

5.2 Control Panel Features

- > Emergency Stop Push Button
- DeepSea Battery Charger

Permanently connected to the battery to keep the battery fully charged. Charger is equipped with a float feature to keep battery ready in a prime starting state.

> Panel Fusing

Fusing to protect the control panel wiring and accessories.

5.3 Control Card

Control card for 600/347V: DSE 7320 MKII

Features of the DSE 7320 MKII Card:

- 132X64 pixel illuminate LCD display
- · Full engine/alternator parameter and alarm read out
- 5-button menu navigation
- One touch Auto-Manual-Test and Stop buttons
- 9 factory configurable outputs
- 8 factory configurable inputs
- Programmable PLC for custom application
- · Remote communication through an RS232 or RS485 connection
- · Utility sensing Option

The control card complies with the following environmental tests:

- BS EN 61000-6-2 (electromagnetic compatibility)
- BS EN 61000-6-4 (electromagnetic compatibility)
- BS EN 60950 (electrical safety)
- BS EN 61000-6-2 (Temperature)
- BS EN 60068-2-6 (Vibration)
- BS EN 60068-2-30 (Humidity)
- BS EN 60068--2-27 (Shock)

V.O-2021 · Last update: 01/21/2021 | Page 4



60Hz KOHLER KDW 1404 Tier 4F

6.4 Display

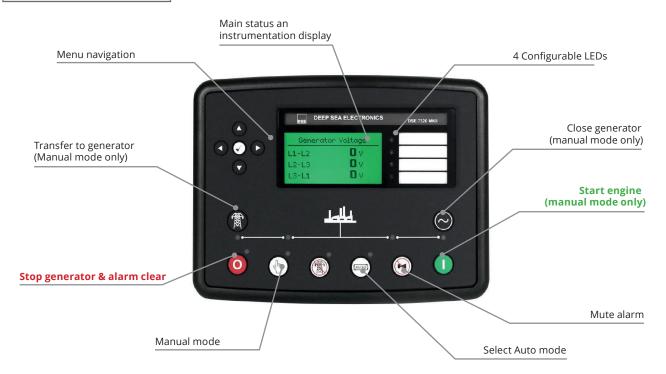
Control card for all Voltages: DSE 7320 MKII

Engine	
Engine Speed	Engine Hours
Oil Pressure	Number Engine Starts
Battery Voltage	Fuel Consumption
Fuel level	Engine Temperature

Generator	
Voltage (L-N)	Voltage (L-L)
Frequency	Amperage
Power Factor	Load (kW, kVA, kVah)

Mains	
Voltage (L-N)	
Voltage (L-L)	
Frequency	

High Engine Temp.
Low Engine Temp.
Low Fuel Level
Main Line Breaker
Over Frequency
Over Speed
Lamp Test Features



Gensets rated for operational ambient temperature of 40 C, in compliance of CSA C282-15. If ambient temperature exceeds 40 C, please contact sales representative for derating information. Emergency standby power(ESP): the maximum power available for which a genset is delivering in the event of a utility power outage or under test conditions for up to 200hours per year. Prime Power(PRP): the maximum power which a genset is capable of delivering continuously for an unlimited number of hours per year.

V.2-2019 · Last update: 10/17/2019 | Page 5

