

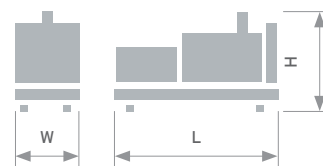


Measures:

L: 3000 mm H: 2100 mm
W: 1120 mm

Weight (dry):

4960 lbs / 2250 kg



60Hz



Diesel



Water cooled



Open



1800 r.p.m.



CSA Approved or Equivalent

1 Genset General Description

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

General Technical Data			
Engine	VOLVO TAD 754 GE		
Alternators	240/120V	Wdg.	STAMFORD HCI544D-w311
		311-1ph	
	208/120V	Wdg.	STAMFORD S4L1D-E
		311	
	600/347V	Wdg.	STAMFORD UCI274H
		17	
Performance Class	G3		
Frequency	60Hz		
Control Panel	240/120V		DSE 7320 MKII
	208/120V		DSE 7320 MKII
	600/347V		DSE 7320 MKII
Noise level (dBA@7m)	N/A (Indoor)		

Voltage (v)	PRP (kW)	ESP (kW)	PRP/ESP (A)
240/120V	208	228	867/950
208/120V	208	229	723/795
600/347V	204	220	246/265

PRP: Continuous power ("Prime Power") ISO 8528-1 standard.

ESP: Emergency power ("Emergency Standby Power") ISO8528-1 standard.

2 Engine Specifications

› VOLVO TAD 754 GE Diesel engine, inline 6-cylinders, 4-stroke. Turbocharged aspiration, air intake system. Electronic regulation. Complying with Tier 3 emissions.

Engine General Data

Manufacturer/Model	VOLVO TAD 754 GE	Number of Cylinders	6
R.P.M.	1800	Engine Capacity	7,2
Max. Power (kWm) (net)	245	Cooling System	Water cooled
Power PRP (Kwm) (net)	222	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.

50% PRP 30,9 l/h (13US gals/h)

75% PRP 49,2 l/h (13US gals/h)

100% PRP 56,8 l/h (15US gals/h)

110% ESP N/A l/h (N/AUS gals/h)

2.2 Cooling System

› Cooling by fully distributed coolant in a closed circuit driven by a pump activated by the engine. Tropicalized radiator. Original parts from the engine manufacturer.

4,2

Fan Airflow (m³/s)

15,2
(15,2)

Fan Power Consumption, hp (kW)

34

Engine + Radiator Capacity (l)

1500
120V

Blockheater (W/V)

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 34L

With oil pressure reading sensor

2.4 Air Intake System

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

Combustion Air Volume 197 l/h

2.5 Start System

➤ Start system by electric motor. battery (without maintenance) with disconnecter and charging alternator driven by the starter motor 24V, original parts from the engine manufacturer.

Number of Batteries

2

Battery Features

4D-9

Starting Voltage

24V

2.6 Exhaust System

Exhaust System	
Exhaust Gas Volume	39,7 m³/min
Exhaust Gas Temperature	485 °C
Exhaust External Diameter	N/A" (N/A mm)
Max. Exhaust Backpressure	7kPa

3 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 HCI544D-w311	STAMFORD S4L1D-E	STAMFORD UCI274H
Winding No.	311-1ph	311	17
Voltage Regulator AVR	PMG + MX341	PMG + MX341	PMG + MX341
Voltage Regulator	±1%	±1%	±1%
ESP Power Rating 40°C (kW)	253	336	220
PRP Power Rating 40°C (kW)	230	320	204
Number of Phases	1	3	3
Power Factor (cos φ)	1	0,8	0,8
Efficiency at 100% Load	93,6%	93,4%	93,6%
Efficiency at 110% Load	92,8%	93,1%	93,4%

The alternator complies with the following standards:

- Class H temperature rise 125°C (257°F), Standby (ESP).
- Class H temperature rise 105°C (302°F), Prime (PRP).
- 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.

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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

1000 Amps, Adj.

208/120

800 Amps, Adj.

600/347

400 Amps, Adj.

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)

6.4 Display

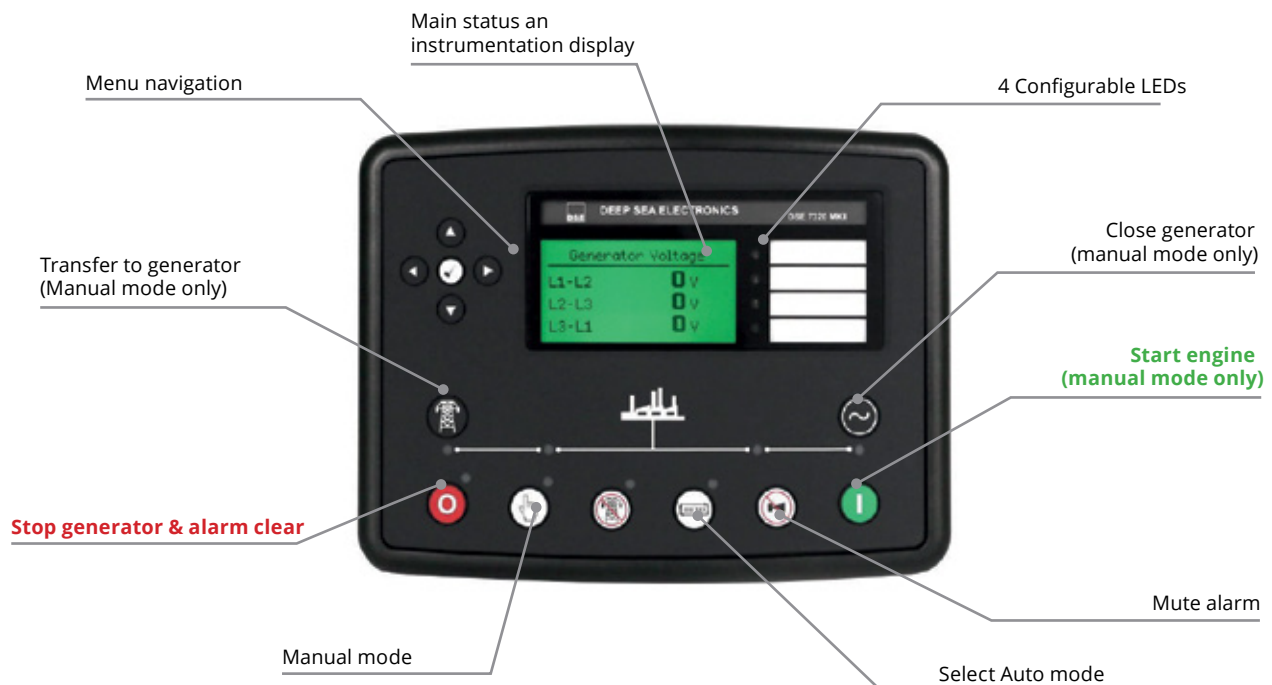
Control card for all Voltages: DSE 7320 MKII

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

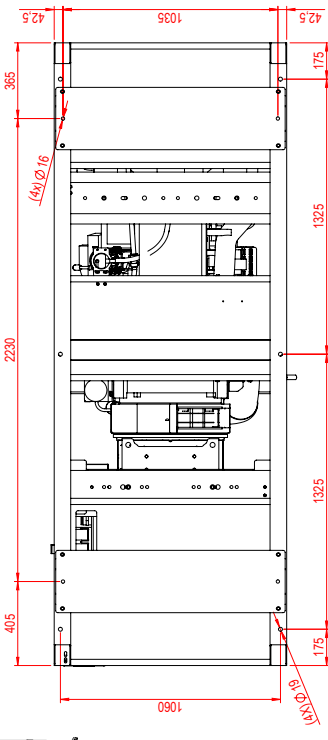
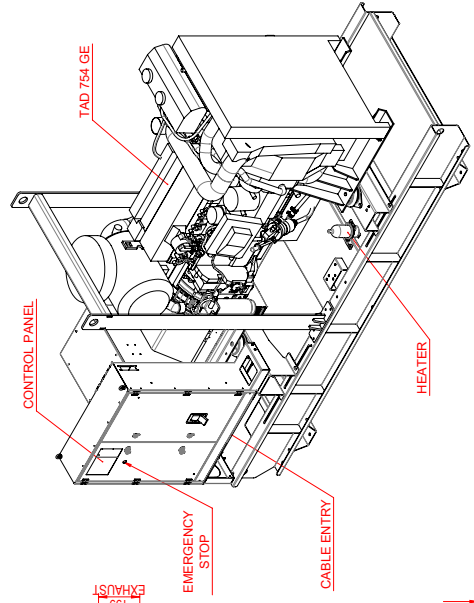
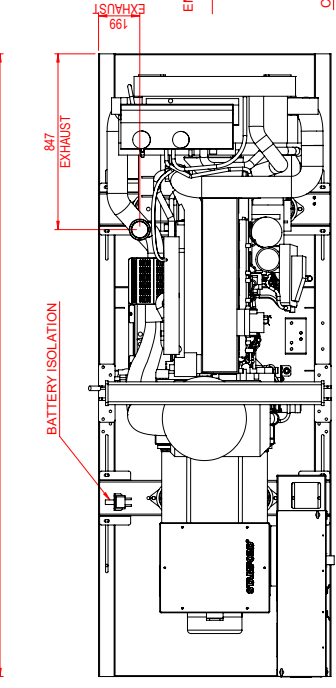
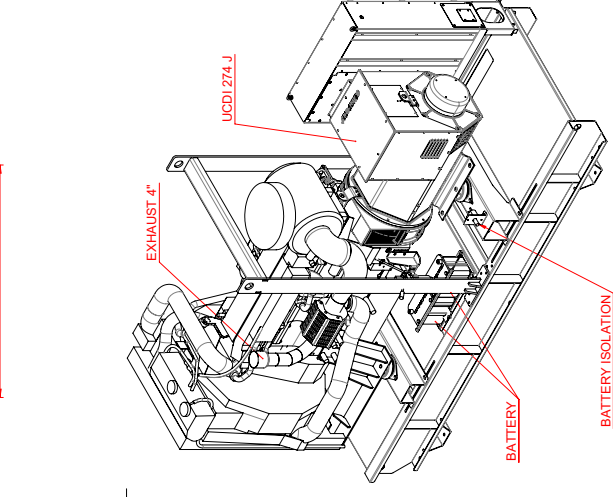
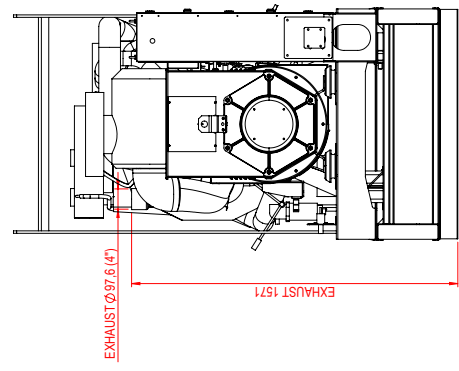
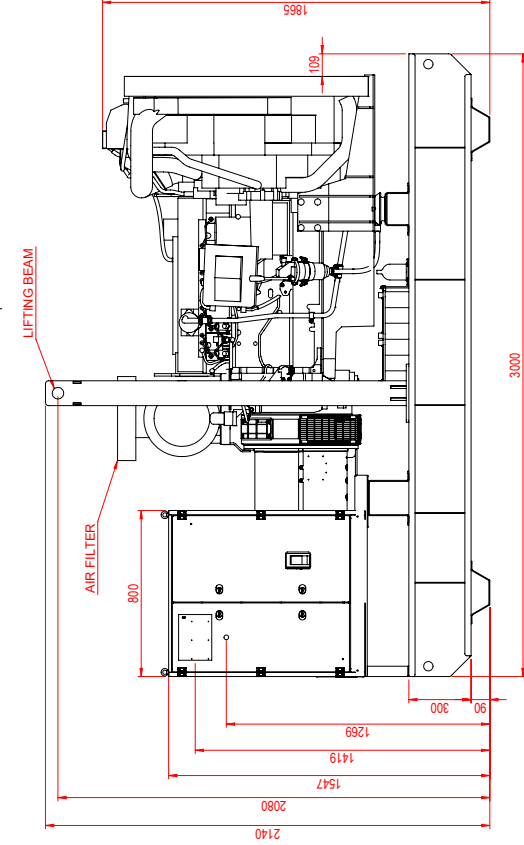
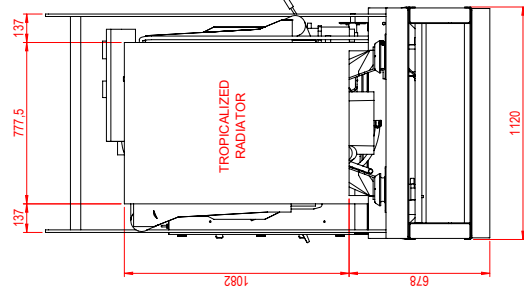
Generator	
Voltage (L-N)	Voltage (L-L)
Frequency	Amperage
Power Factor	Load (kW, kVA, kWh)

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

Alarm Detected	
Overcrank	High Engine Temp.
Low Oil Pressure	Low Engine Temp.
Low Coolant Level	Low Fuel Level
Low Plant Battery Voltage	Main Line Breaker
Over Voltage	Over Frequency
Under Voltage	Over Speed
Control Not In Auto	Lamp Test Features
Radiator level sender	



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.



Measures in mm

Sommers reserves the right to change

GENSET	VOLTAGE	ENGINE	ALTERNATOR	THEORETICAL WEIGHT (KG)																														
DGWW 230 ST 3	208/120V	TAD 754 GE	UCDI 274 J	2330																														
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GENSET 5KS

DGWW 230 ST

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REVISION		REVISION	
DATE		DATE	
BY		BY	
CHECKED		CHECKED	
APPROVED		APPROVED	

