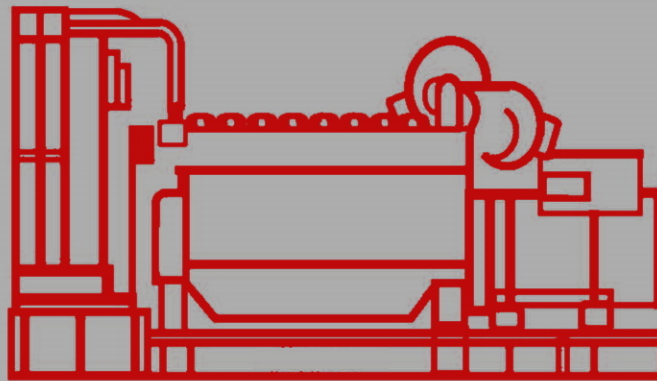


## Industrial Diesel Generator Sets

EPA Certified Tier 3 for Stationary Emergency Applications



### Genset Standby Power Rating

<b>Voltage</b>	208/120V
<b>Power</b>	130kW
<b>Phase</b>	3
<b>Pf</b>	0,8
<b>Current</b>	434A
<b>Alternator Model</b>	UCI274F
<b>Temp Rise</b>	125 / 40 °C
<b>Connection</b>	12 Leads WYE

#### Continuous Power

The maximum power which a generating set is capable of delivering continuously whilst supplying a constant electrical load. Average load can be 100%. The generator must not be overloaded.

#### Prime Power

The maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load. Average load should be 70%. The generator can be overloaded 10% for 1 hour per 12 hrs.

#### Standby Power

The max power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 hrs of operation per year under average of 70% load. Overloading isn't permissible.

### Certifications & Standards

The Generator set is designed and manufactured in a facility certified to **ISO9001:2015, ISO14001:2015, ISO45001-2018** and **ISO10002:2014 standards**.

Generator set is **UL2200**, cUL listed and meets **ISO 8528-5**

The generator set, with its components, are **prototype tested**, factory-built and production tested per UL standards.

The generator set meets **NFPA110 Level 1** when equipped with the necessary accessories and installed per NFPA standards.

## Industrial Diesel Generator Sets

### Standard Features - Engine

EPA Certified – Emergency Stationary Only	ISO 8528, ISO 3046, BS 5514, DIN 6271 standards
Heavy-duty, 4-cycle, direct injection	Capable of full rated load acceptance in one step
Unit Mounted Radiator	Low emission and maximum reliability and durability
Electronic Isochronous Governor	Heavy Duty Air Cleaner w/Restriction Gauge
Fuel – Water Separator Filter	Flex Exhaust Connection

### Application Data - Engine

Engine		Fuel Consumption	
Manufacturer	John Deere	Standby Power (100%)	9.91 gal/hr
Model	4045HF285	At 75%	7.64 gal/hr
Number of Cylinders	4	At 50%	5.56 gal/hr
Cycle	4 strokes	At 25%	3.01 gal/hr
Cubic Capacity	4.5 liters	<b>Cooling System</b>	
Bore x Stroke	106mm x 127mm	Ambient Capacity of Radiator	116.6 °F (47 °C)
Aspiration	Turbocharged and air-to-air aftercooled	Total Coolant Capacity	8.5 Liter
Combustion System	Direct Injection Diesel	Engine Coolant Flow	180 L/min
BMEP	1980 kPa	Combustion Air Flow	8.8m <sup>3</sup> /min
Rated rpm	1800	Thermostat Operating Range	82 °C to 95 °C
		Max Top Tank Temperature	110 °C

Electrical System	
Starting Motor Voltage	12V
Battery Charging Alternator	65A
Battery Qty, CCA Rating	1 x 102Ah, 860A

Exhaust System	
Exhaust Gas Temp	572 °C
Max Allowable Back Pressure	7.5 kPa
Exhaust Gas Flow	24.6 m <sup>3</sup> /min

Fuel System	
Type of Injection System	HPCR
Fuel Pump	Denso HP3
Governor Type	Electronic
Priming Pump Type	Manual

## Industrial Diesel Generator Sets

### Standard Features - Alternator

Brushless Single Bearing	AREP Excitation
125/40 °C Temperature Rise	300% Short Circuit Capability
Class H Insulation	Low reactance 2/3 pitch windings
Low waveform distortion with non-linear loads	Self-ventilated and drip-proof construction
EC 60034-1; CEI EN 60034-1; NEMA MG 1.22, NF 51- 100,111	BS 4999-5000; VDE 0530, OVE M-10

### Application Data - Alternator

Manufacturer	Stamford
Type	4 Poles, Brushless
Protection	IP 23
Voltage Regulation	± 1.0 %
One Step Load Acceptance	100% of rated load
Bearing	Double
Altitude	≤ 1000 meters
Over Speed	2250 rpm
AVR	SX460
Genset Voltage	208/120V
Alternator Model	UCI274F
Leads	12 - WYE
P.F.	0,8
Power @ Continuous 40 °C	181.3 kVA/ 145kW
Efficiency @ 100% load	92.1%

### Application Data - Circuit Breaker

Genset Voltage	208/120V
ABB (80% Rated) Breaker Model	T5N 600
Current Rating (In)	600A
Trip Unit	LS/I

## Industrial Diesel Generator Sets

### Control Panel

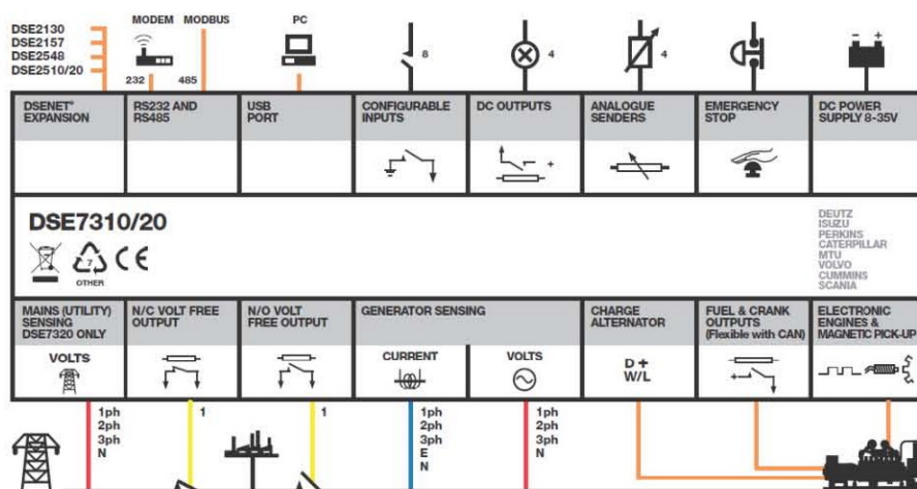
Manufacturer	DSE - Deep Sea Electronics
Model	7310 MKII
DC Supply	8 to 35V Continuous
Generator Voltage Range (Ph-Ph)	26V to 719V AC
Generator Frequency Range	3,5Hz to 75Hz
Standards	BS EN 61000-6-2, BS EN 61000-6-4, BS EN 60950, BS EN 60529 BS EN 60068-2-1, BS EN 60068-2-2 BS EN 60068-2-6, BS EN 60068-2-30 BS EN 60068-2-78, BS EN 60068-2-27



Key Features
License free PC software
4-Line back-lit LCD text display
Five key menu navigation
LCD Alarm Indication
DSENet expansion compatibility
Internal PLC editor
Protection disable feature
Data logging facility
Fully configurable via PC
Front panel configuration
Power safe mode
6 configurable DC outputs
2 configurable volt free relay outputs
6 configurable analogue/digital inputs
8 configurable digital inputs
Configurable 5 stage dummy load and load shedding outputs
Backed up real time clock
Fuel usage monitor and low fuel level alarms
Remote SCADA monitoring via DSE Configuration Suite PC Software
Advanced SMS messaging (additional external model required)
Start & Stop capability via SMS messaging
Configurable event log (250)
Multiple date and time scheduler

Protections
✓ Gen. Voltage – under / over
✓ Gen. Freq. – under / over
✓ Engine Speed – under / over
✓ Engine Oil Pressure – low
✓ Engine Temp – low / high
✓ Battery Voltage – low / high
✓ Weak Battery
✓ Fail to Start / Stop
✓ Charge Alternator Fail
✓ Over Current & Load (kW/kVAr)
✓ Unbalanced Load
✓ Independent Earth Fault
✓ Reverse Power
✓ Loss of Speed Signal

Instruments
✓ Gen. Voltage (L-L/L-N)
✓ Gen. Frequency
✓ Engine speed
✓ Oil Pressure
✓ Water Temperature
✓ Battery Voltage
✓ Run Time
✓ Phase Sequence
✓ Power monitoring (kWh/kVAh/kVArh)
✓ Power (kWh/kVAh/kVArh)
✓ Power Factor
✓ Generator Current
✓ Generator Load (%)
✓ Earth Current



## Industrial Diesel Generator Sets

### Standard Features - General

Heavy duty structural steel base frame

Battery charger

Jacket Water Heater

Oil & Coolant Drain Extensions

Operations Manual

Critical grade silencer

Battery tray and cables

Heater Isolation Valves

Rubber vibration Isolator

Standby Limited Warranty

### Battery Charger

Manufacturer	DSE
Model	9470 MKII
Operation Voltage (L-N)	90V to 305V
Output Current	10A

### Jacket Water Heater

Manufacturer	Hotstart
Model	TPS101GT10-000
Operation Voltage	120V
Power	1000W

### Dimensions, Weights & Sound Levels

	L x W x H (inches)	Weight (lbs)	Sound Level *
Open Skid	97 x 40 x 59	3121	-
Level 2 Enclosure	140 x 40 x 67	4224	TBA

\* Sound data as measured at 23 feet (7 meters) in accordance with ISO 8528-10 at stan-by power rating

### Fuel Tank (UL142 Listed – Option)

Size	L x W x H (inches)	Weight (lbs)
250gal/24hr		

