Industrial Diesel Generator Sets

EPA Certified Tier 3 for Stationary Emergency Applications



Genset Standby Power Rating

Voltage	208/120V	480/277	600/347V	240/120V	
Power	60kW	60kW	60kW	60kW	
Phase	3	3	3	1	
Power Factor	0.8	0.8	0.8	1.0	
Current	208A	90A	72A	250A	
Alternator Model	UCI224G(Wnd-311)	UCI224G(Wnd-311)	UCI224F(Wnd-17)	UCI224G(Wnd-06)	
Temp Rise	125/40°C	125/40°C	125/40°C	125/40°C	
Connection	12 Lead	12 Lead	12 Lead	12 Lead	

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 can be 70%. The generator can be overloaded 10% for 1 hour per 12 hours

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 the average of 70% load. Overloading isnt permissable.

Cetifications & Standards

The Generator set is deisgned and manufactured in a facility certified to ISO9001:2015, ISO4001:2015, 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.



Standard Features - Engine

EPA Certified - Emergency Stationary Only

Heavy-duty, 4-cycle, direct injection

Unit Mounted Radiator

Electronic Governor

Fuel - Water Seperator Filter

ISO 8528, ISO 3046, BS 5514, DIN 6271 standards

Capable of full rated load acceptance in one step

Low emission and maximum reliability and durability

Heavy Duty Air Cleaner w/ Restriction Gauge

Flex Exhaust Connection

Application Data - Engine

Engine	
Manufacturer	Perkins
Model	1104D-E44TG1-EPAK-7P
Number of Cylinders	4 in-line
Cycle	4 stroke
Cubic Capacity	4.4 liter
Bore x Stroke	4.1in x 5in
Aspiration	Turbocharged
Combustion System	Direct Injection
Standby Engine Power	64.7bhp
Prime Engine Power	71.4bhp
Rated RPM	1800

Fuel Consumption (Standby)	
100%	5.00 gal/hr
75%	4.50 gal/hr
50%	3.17 gal/hr
25%	1.58 gal/hr

Electrical System	
Starting Motor Voltage	12V



Standard Features - Alternator

Brushless Double Bearing

125/40°C Temperature Rise

Class H Insulation

Low waveform distortion with non-linear loads

EC 60034-1; CEN 60034-1; NEMA MG 1.22, NF 51-100. 111

AREP Excitation

300% Short Circuit Capability

Low reactance 2/3 pitch windings

Self-ventilated and drip-proof construction

BS 4999-5000; VDE 0530, OVE M-10

Application Data - Alternator

Manufacturer	Stamford
Model	UCI224G
Protection	IP 23
Voltage Regulation	± 1.00%
Power Factor	0.8
Frequency	60Hz
Winding Leads	12
Insulation System	H Class
Cooling Air	596 CFM
Phases	3



Control Panel

Manufacturer	DSE - Deep Sea Electronics
Model	7310 MKII
DC Supply	8 to 35V Continuous
Generator Voltage Range (Ph-Ph)	26V to 719VAC
Generator Frequency Range	3.5Hz to 75Hz
	BS EN 91000-6-2, BS EN 61000-6-4
	BS EN 60950, BS EN 60529
Standards	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 configuable via PC

Front panel configuration

Power safe mode

6 configurable DC outputs

2 configurable volt free relay outputs

6 configurable analogue/digital imputs

8 configurable digital inputs

Configurable 5 stage dummy load and load sheeding outputs

Backed up real time clock

Fuel usage monitor and low fuel level alarms

Remote SCADA monitoring vis DSE Configuration Suite PC software

Multiple date and time scheduler

Start & Stop capability vis SMS Message

Configurable event log (250)

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)

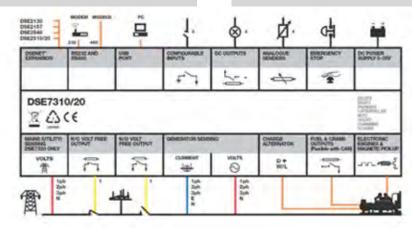
Power (kWh/kVAh/kVArh)

Power Factor

Generator Current

Generator Load (%)

Earth Current





Standard Features - General

Heavy duty structural steel base frame

Battery Charger

Jacket Water Heater

Exhaust Insulation Cover

Operations Manual

Critical Grade Silencer
Battery tray and cables
Flex Fuel Lines
Rubber Vibration Isolator
Stanby Limited Warranty

Battery Charger

Manufacturer	DSE
Model	9470 MKII
Operation (L-N)	90V to 350V
Output Current	10A

Jacket Water Heater

Manufacturer	Hotstart
Model	PS051GT10-000

Dimensions, Weights & Sound Levels

	L x W x H (inches)	Weight (lbs)	Sound Level*
Open Skid	87.40 x 39.37 x 62.33	2339.85	-
Level 2 Enclosure	138.98 x 39.37 x 69.66	2652.48	ТВА
Level 3 Enclosure	TBA	TBA	ТВА

^{*}Sound data as measured at 23 feet (7 meters) in accorance with ISO 8528-10 at stand-by power rating

Fuel Tank (UL142 Listed-Option)

Size	L x W x H (inches)	Weight (lbs)
150gal/24hr	169.7 x 39.37 x 10.90	1549.41
250gal/48hr	169.7 x 39.37 x 16.41	1843.38
400gal/72hr	169.7 x 39.37 x 24.03	2262.62

Sound Attenuated Enclosure (Option)

Compatible with 2000/14/EC directives
Factor built III Contified
Factory built, UL Certified
Amplified paint against corrosion and rust
Exceeds 2000 hours salt spray test
Level 2/3 Sound Level Compliant
Heavy Duty Steel/Aluminum Structure
Heavy Duty Steel/Aldillillull Structure
High Performance sound absorb material
Vertical air discharge
Full accet was effect in aid a the company
Exhaust muffler inside the canopy





Available Options

(Circuit Breakers
ı	Magnetic Trip
•	Thermal Magnetic Trip
1	Electronic Trip LS/I
I	Electronic Trip LSI
1	Electronic Trip LSIG
	80% Rating
	100% Rating
ı	Electrically Operated CB (Paralleling)
:	Shunt Trip - wired to controller
	Auxiliarry Contact - volt free contact

Alternator
Upsize Alternator
Space Heater
RTD Sensors

Electrical
GFCI Receptable Outlet
Load Center
Power Outlet (14-50R, 120/240V, 50A)
Power Outlet (TT30R, 120V, 30A)
Power Outlet (120/240V, 80A) NEMA5-20R, NEMA14-50R, TT-30R
Surge Protector

Control System
Remote Annuciator Panel - 8 lights
Remote Annuciator Panel - 16 lights
Remote Annunciator Panel - 24 lights
Common Alarm Relay - V free contact
Generator Alarm Relay - V free contact
Control Panel Heater
Dry Cpntacts Expansion Relay
Remote E-Stop Switch
Remote E-Stop Swtich - Break Glass
Remote Monitoring (DSE892 SNMP)
Remote Monitoring (DSE890 Webnet)
Paralleling System Upgrade
Manual Voltage Adjust
Manual Speed Adjust

Miscellaneous
ATS Panel
Rated Power Factor Factory Testing
Enclosure Heater
Oil Pan Heater
Spring Isolators
Crankcase Ventilation Filter
Critical Silencer Set w/ Open Skid Unit

Enclosures
Sound Attenuated Level 3
Sound Attenuated Level 3
Enclosure DC light w/ timer
Enclosure AC light
Enlcosure Space Heater
Motorized Air Inlet Damper
Gravity Radiator Louver

Fuel Tank
UL142 Listed
UL2085 Listed
Fuel Level Display on Controller
Fuel/Water Seperator

Battery System
Starting Batteries
Battery Charger (NFPA110 Compliant)
Battery Wrap Heater
Battery Restraint
Battery Disconnect Switch