

# Welland



THE QUEEN'S AWARDS  
FOR ENTERPRISE:  
INTERNATIONAL TRADE  
2018



WP250

WP275

WP300

UK Made Diesel  
Generators

50 Hz

With Perkins  
Engines



 **Perkins®**

Diesel Power

**STAMFORD**

**Your Power.  
Our Passion.**

# Generator Power Summary

	PRP kW	PRP kVA	ESP kW	ESP kVA
WP250	200.0	250.0	220.0	275.0
WP275	226.7	283.3	248.0	310.1
WP300	248.0	310.0	272.0	340.0

Ratings based on NTP conditions 3 phase, 400V, 1500RPM, 50Hz, 0.8 Power Factor

## Engine Overview

	WP250	WP275	WP300
ENGINE MANUFACTURER	PERKINS	PERKINS	PERKINS
MODEL	1506A-E88TAG3	1506A-E88TAG4	1506A-E88TAG5
ENGINE ORIGIN	USA	USA	USA
ASPIRATION	TURBOCHARGED	TURBOCHARGED	TURBOCHARGED
GOVERNOR TYPE	ELECTRONIC	ELECTRONIC	ELECTRONIC
NO. OF CYLINDERS	6	6	6
DISPLACEMENT	8.8	8.8	8.8
BORE	112mm	112mm	112mm
STROKE	149mm	149mm	149mm
COOLING TYPE	LIQUID	LIQUID	LIQUID
COOLANT CAPACITY (L)	29.6	33.2	33.2
OIL CAPACITY (L)	41.0	41.0	41.0
MAX. EXHAUST OUTLET TEMPERATURE	558	576	574
FUEL CONSUMPTION L/HR			
50% LOAD	28.9	31.6	33.0
75% LOAD	41.6	45.8	48.2
100% LOAD	55.5	60.2	64.9
110% LOAD	60.7	66.3	73.1

ESP - STANDBY POWER - The maximum power available during a variable power sequence in which a Welland Power Diesel Generator is capable of delivering in the event of power outages or under test conditions.

PRP - PRIME POWER - The maximum power that the Welland Power Diesel Generator will be able to deliver continuously. Average load should be circa 70%. The generator can have 10% overload for 1 hour per 12 hours.

# Alternator Overview

	WP250	WP275	WP300
ALTERNATOR MANUFACTURER	STAMFORD	STAMFORD	STAMFORD
MODEL	UCDI 274K	S4L1D-D41	S4L1D-D41
PHASES	3	3	3
BEARINGS	SINGLE	SINGLE	SINGLE
POLES	4	4	4
LEADS	12	12	12
AVR MODEL	SX460	AS440	AS440
VOLTAGE REGULATION	± 1%	± 1%	± 1%
INSULATION CLASS	H	H	H
EXCITATION	SELF EXCITED	SELF EXCITED	SELF EXCITED
CONNECTION TYPE	SERIES STAR	SERIES STAR	SERIES STAR
TOTAL HARMONIC CONTENT (NO LOAD)	<1.5%	<1.5%	<1.5%
EFFICIENCY	92.7%	92.9%	92.9%
SHORT CIRCUIT CAPACITY	>200%	>200%	>200%
REACTANCES X <sub>d</sub>	2.550	2.940	2.940
REACTANCES X' <sub>d</sub>	0.119	0.190	0.190
REACTANCES X'' <sub>d</sub>	0.078	0.130	0.130

Welland Power standard specification includes alternators from stock that are randomly allocated based on the physical specifications required. Specific reference can be made to non-physical attributes such as country of origin, date of manufacture, warranty length and or other attributes that may be important to you or your customer at point of order and these requests may incur mandatory additional costs in line with our cost of providing these attributes.

## Alternative Alternator Options

	WP250	WP275	WP300
MECCALTE	ECO38N-1LA	ECO38N-2LA	ECO38N-2LA

# Control Panel Overview



**DEEP SEA  
ELECTRONICS**

All standard Welland Power Diesel Generators come complete with a Deep Sea Electronics DSE7320 MKII Auto Mains Failure Control Module.

The UK made DSE7320 MKII Control Module gives outstanding monitoring and is loaded with features.

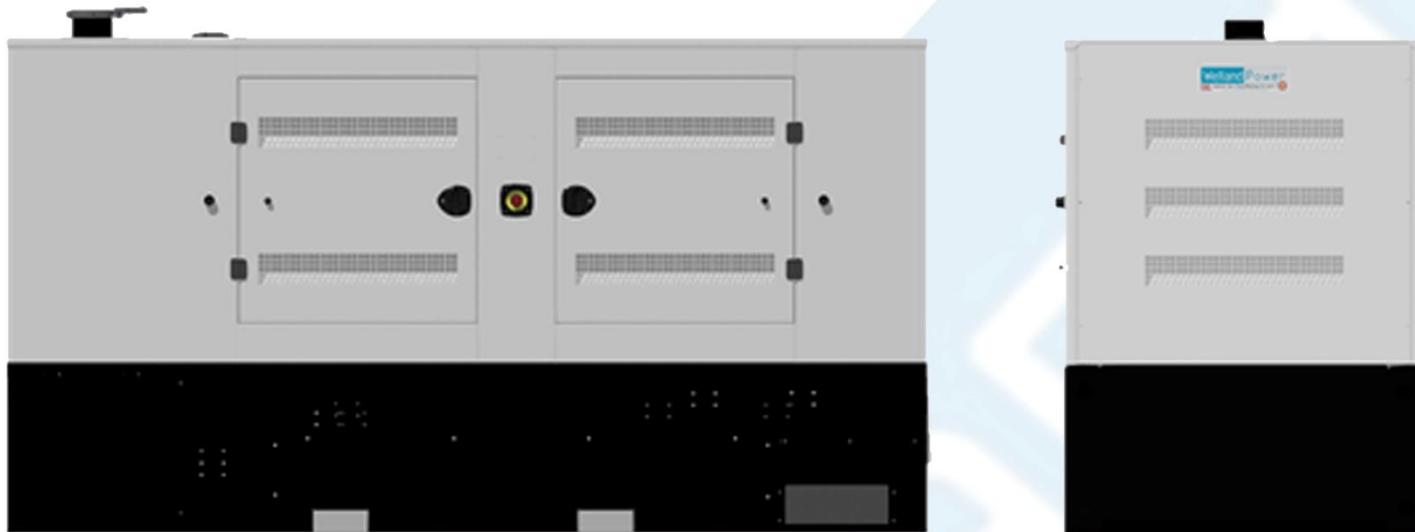
The modules can be easily configured using the DSE Configuration Suite PC software.

	STANDARD	AVAILABLE	ADDITIONAL EQUIPMENT REQUIRED
LOW OIL SHUTDOWN	•		
HIGH ENGINE TEMPERATURE SHUTDOWN	•		
UNDER VOLTAGE WARNING / SHUTDOWN	•		
OVER SPEED / OVER FREQUENCY WARNING / SHUTDOWN	•		
UNDER SPEED / OVER FREQUENCY WARNING / SHUTDOWN	•		
OVER CRANK / FAIL TO START ALARMS	•		
OVER CURRENT ALARMS	•		
THREE PHASE VOLTAGE MONITORING	•		
START, CRANK, CRANK REST, WARM UP TIMERS	•		
RETURN AND COOL DOWN TIMERS	•		
BATTERY UNDER/OVER VOLTAGE ALARMS	•		
4 LINE BACK LIT LCD TEXT DISPLAY	•		
FIVE KEY MENU NAVIGATION	•		
CUSTOMISABLE STATUS SCREENS	•		
POWER SAVE MODE	•		
SUPPORT FOR UP TO 3 REMOTE DISPLAY UNITS	•		
CONFIGURABLE TIMERS AND ALARMS	•		
RECORDED EVENT LOG (250 OCCURENCES)	•		
CAN AND MAGNETIC PICK UP / ALT SENSING		•	MAGNETIC PICK UP / ECU
FUEL USAGE MONITORING AND LOW FUEL ALARM		•	FUEL TANK SWITCH / SENDER
MANUAL FUEL PUMP CONTROL		•	FUEL PUMP
ENGINE EXERCISER	•		
PROTECTIONS DISABLED FEATURE	•		
kW AND kV PROTECTION	•		
REVERSE POWER PROTECTION	•		
POWER MONITORING (kW h, kV Ar, kV A h, kV Ar h)	•		
LOAD SWITCHING		•	ATS WITH AUTOMATIC BREAKER
AUTOMATIC LOAD TRANSFER		•	ATS
UNBALANCED LOAD PROTECTION	•		
INDEPENDENT FAULT EARTH TRIP		•	EARTH CT
USB CONNECTIVITY	•		
FULLY CONFIGURABLE VIA DSE CONFIG SUITE	•		
RS232 AND RS485 COMMUNICATIONS		•	COMPATIBLE HARDWARE / SOFTWARE
CONFIGURABLE GENCOMM PAGES	•		
ADVANCED SMS MESSAGING AND START/STOP		•	4G GATEWAY MODULE
ETHERNET COMMUNICATIONS		•	DSE 855 MODULE
MODBUS INTEGRATION		•	COMPATIBLE HARDWARE / SOFTWARE

# Weight, Dimensions and Canopy Specifications

- All Welland Power bases and canopy panels are made in the UK in the Welland Power factory.
- Easily moved via forklift.
- Integrated silencer built into the base.
- Large 480 litre pressure tested steel fuel tank.
- Bases are constructed from 4mm Mild Steel, finished with a textured black powder coat (RAL9005).
- Designed for tropical climates to ensure sufficient air flow for high ambient temperatures with a tropical radiator as standard.

- Canopy panels are made from 2mm zinc coated mild steel and finished with a clean white powder coat finish (RAL9910).
- Fully lockable canopy.
- Security bolts to prevent unauthorised access.
- Emergency Stop button as standard.
- High quality ergonomically designed adjustable handles.
- Large removable doors for excellent access.
- Black zinc die cast hinges on doors, tested and proven to withstand extremely corrosive conditions.
- External access to radiator filler intake.



		FUEL TANK SIZE (L)	LENGTH mm	WIDTH mm	HEIGHT mm	WEIGHT kg
OPEN FRAME SPECIFICATION	WP250	730	3310	1165	1735	2237
	WP275	730	3310	1165	1735	2498
	WP300	730	3310	1165	1735	2498
CANOPIED SPECIFICATION	WP250	480	3558	1454	2018	3002
	WP275	480	3558	1454	2018	3267
	WP300	480	3558	1454	2018	3267

## SOUND PRESSURE LEVELS dB

	15m	7m	1m
WP250	64.2	70.2	81.2
WP275	64.3	70.3	81.3
WP300	64.4	70.5	81.4

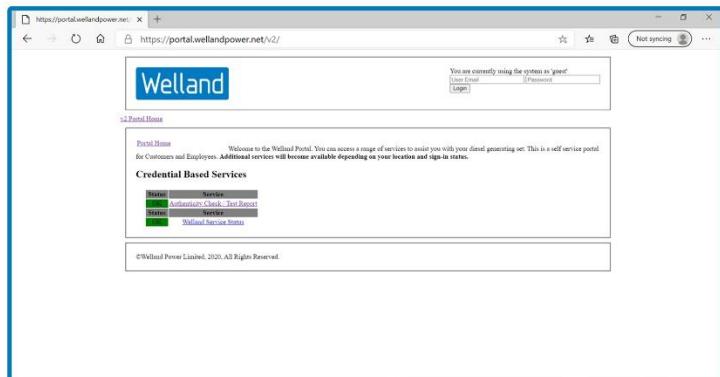
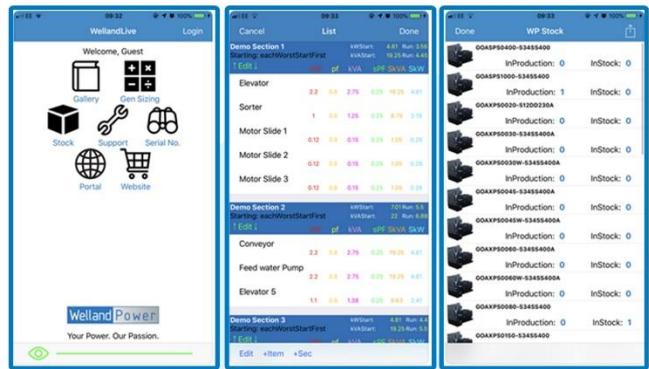
# Useful Information

When purchasing your diesel generator, it is crucial to size it correctly.

For prime applications average load applied should be in the region of 70% load.

To assist in sizing your required generator, please use our Generator Sizing Tool available on most compatible smart devices.

Other key features of the application include support links, stock updates and portal features.



The Welland Power Portal <http://portal.wellandpower.net/> is easily accessible and gives you and your customers instant access to a variety of information including the test certificates for each Welland Power Diesel Generator through input of the unique generator serial number or QR code search on the set.

All Welland Power Diesel Generators are easily identifiable by their unique laser engraved metal generator plates.

The Generator Name Plates show the generator ratings and contain full details about the Engine and Alternator, including manufacturer, model numbers, serial numbers and country of origin.

Each generator has a unique generator serial number that can be input at the Welland Power portal for support, or a QR Code that automatically opens to the correct webpage when scanned with any smart phone.



We are very proud to be current holders of:

## The Queens Award For Enterprise: International Trade.

All Welland Power sets come complete with Welland Power branded sticker kits applied as well as HRH The Queen's Official Logo.

Welland Power were formally presented with the Award at the Welland Power Factory by the Her Majesty The Queen's representative Lord Lieutenant Toby Dennis.

Previously Managing Director Charlie Farrow has met with his Royal Highness Prince Charles of Wales to receive the Queens Award following recommendations by Teresa May, who was the UK Prime Minister at the time.

The Award was presented to acknowledge the success and growth of the company over the last few years.

# Standard Specification

	WP250	WP275	WP300
DSE BATTERY CHARGER	STANDARD	STANDARD	STANDARD
TROPICAL RADIATOR	STANDARD	STANDARD	STANDARD
FIRST FILL (OIL & COOLANT)	STANDARD*	STANDARD*	STANDARD*
DSE7320 MKII CONTROL MODULE	STANDARD	STANDARD	STANDARD
SINGLE SKIN BASE TANK	STANDARD	STANDARD	STANDARD
BUNDED BASE TANK	OPTIONAL	OPTIONAL	OPTIONAL
GLOW PLUGS	N/A	N/A	N/A
ENGINE COOLANT HEATER	OPTIONAL	OPTIONAL	OPTIONAL
LOW WATER LEVEL SWITCH	OPTIONAL	OPTIONAL	OPTIONAL
CE UPGRADE	OPTIONAL	OPTIONAL	OPTIONAL
ELECTRONIC GOVERNOR	STANDARD	STANDARD	STANDARD
SUMP DRAIN KIT	STANDARD	STANDARD	STANDARD
SUMP DRAIN PUMP	OPTIONAL	OPTIONAL	OPTIONAL
430 STAINLESS CANOPY	OPTIONAL	OPTIONAL	OPTIONAL
ANTI CONDENSATION HEATER	OPTIONAL	OPTIONAL	OPTIONAL
THERMISTORS	OPTIONAL	OPTIONAL	OPTIONAL
PMG UPGRADE	OPTIONAL	OPTIONAL	OPTIONAL
DROOP CT	OPTIONAL	OPTIONAL	OPTIONAL
CIRCUIT BREAKER	400A MCCB	630A MCCB	630A MCCB

\* Welland Power Open Specifications do not include first fill as standard. First fill can be provided upon request.

## Contact Us



Welland Power Diesel Generators are manufactured in the UK, factories located at Unit 2, 5 & 6 Welland Business Park, Clay Lake, Spalding, Lincolnshire, PE126BL



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