

Welland



THE QUEEN'S AWARDS
FOR ENTERPRISE:
INTERNATIONAL TRADE
2018



WP350

WP400

WP450

WP500

WP500E2

**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
WP350	284.6	355.7	325.6	407.0
WP400	325.3	406.6	365.3	456.7
WP450	360.0	450.0	400.0	500.0
WP500	400.0	500.0	416.0	520.0
WP500E2	410.2	512.8	450.8	563.4

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

Engine Overview

	WP350	WP400	WP450	WP500	WP500E2
ENGINE MANUFACTURER	PERKINS	PERKINS	PERKINS	PERKINS	PERKINS
MODEL	2206A-E13TAG2	2206A-E13TAG3	2506A-E15TAG1	2506A-E15TAG2	2506A-E15TAG2
ASPIRATION	TURBO-CHARGED	TURBO-CHARGED	TURBO-CHARGED	TURBO-CHARGED	TURBO-CHARGED
GOVERNOR TYPE	ELECTRONIC	ELECTRONIC	ELECTRONIC	ELECTRONIC	ELECTRONIC
NO. OF CYLINDERS	6	6	6	6	6
DISPLACEMENT	12.5	12.5	15.2	12.5	12.5
BORE	130mm	130mm	137mm	137mm	137mm
STROKE	157mm	157mm	171mm	171mm	171mm
COOLING TYPE	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID
COOLANT CAPACITY (L)	51.4	51.4	58.0	58.0	58.0
OIL CAPACITY (L)	40.0	40.0	62.0	62.0	62.0
MAX. EXHAUST OUTLET TEMPERATURE	630	630	550	550	550

FUEL CONSUMPTION L/HR

50% LOAD	37	42	50	53	53
75% LOAD	54	62	72	76	76
100% LOAD	71	81	95	100	100
110% LOAD	77	89	104	111	111

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

	WP350	WP400	WP450	WP500	WP500E2
ALTERNATOR MANUFACTURER	STAMFORD	STAMFORD	STAMFORD	STAMFORD	STAMFORD
MODEL	S4L1D-E41	S4L1D-F41	S4L1D-G41	HCI 544C	HCI 544D
PHASES	3	3	3	3	3
BEARINGS	SINGLE	SINGLE	SINGLE	SINGLE	SINGLE
POLES	4	4	4	4	4
LEADS	12	12	12	12	12
AVR MODEL	AS440	AS440	AS440	AS440	AS440
VOLTAGE REGULATION	± 1%	± 1%	± 1%	± 1%	± 1%
INSULATION CLASS	H	H	H	H	H
EXCITATION	SELF EXCITED				
CONNECTION TYPE	SERIES STAR				
TOTAL HARMONIC CONTENT (NO LOAD)	<1.5%	<1.5%	<1.5%	<1.5%	<1.5%
EFFICIENCY	93.3%	93.2%	93.3%	93.8%	94.3%
SHORT CIRCUIT CAPACITY	>200%	>200%	>200%	>200%	>200%
REACTANCES X _d	2.790	2.540	3.200	3.280	2.990
REACTANCES X' _d	0.190	0.170	0.170	0.180	0.150
REACTANCES X'' _d	0.130	0.130	0.100	0.130	0.110

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

	WB220	WB250	WB275	WB340	WB350
MECCALTE	ECO38N-3LA	ECO40-1S	ECO40-2S	ECO40-3S	ECO40-3S

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.

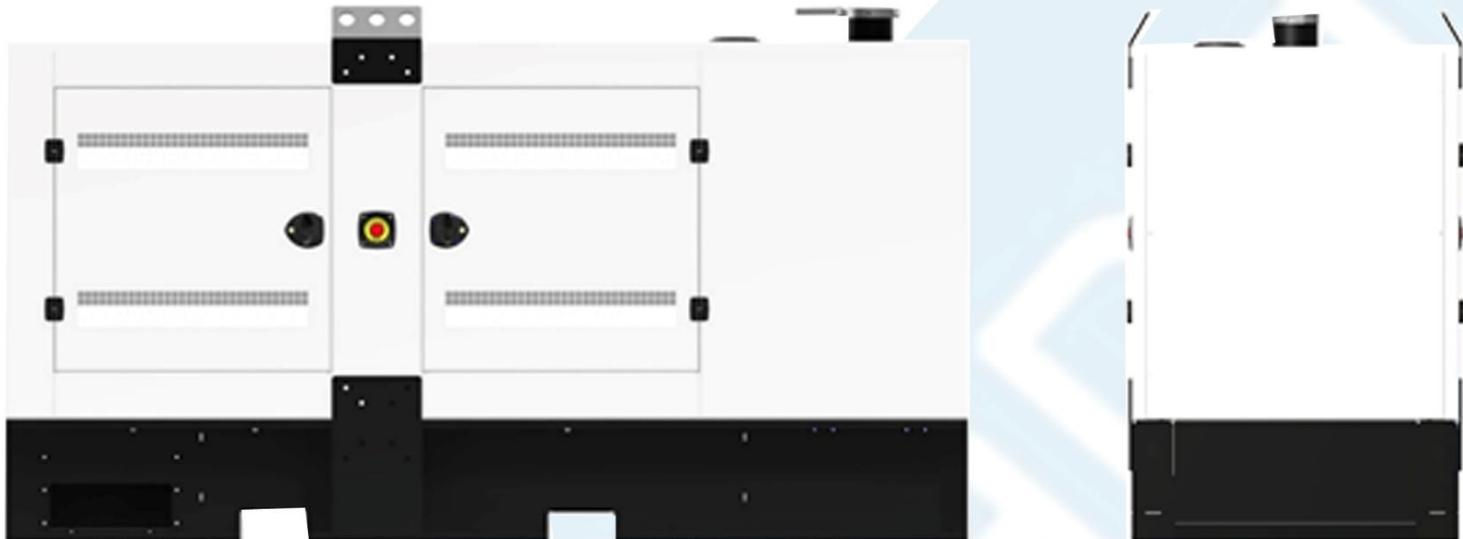
The modules can be easily configured using the DSE Configuration Suite PC software.

	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 within the canopy.
- Large 1300 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	WP350	730	3454	1170	2042
	WP400	730	3454	1170	2042
	WP450	730	3454	1170	2042
	WP500	730	3454	1170	2042
	WP500E2	730	3454	1170	2042
CANOPIED SPECIFICATION	WP350	1300	4908	2164	5191
	WP400	1300	4908	2164	5327
	WP450	1300	4908	2164	5489
	WP500	1300	4908	2164	5692
	WP500E2	1300	4908	2164	5822

SOUND PRESSURE LEVELS dB

	15m	7m	1m
WP350	65.3	69.7	81.6
WP400	65.4	69.7	81.7
WP450	65.7	69.9	81.9
WP500	66.0	70.1	82.1
WP500E2	66.0	70.1	82.1

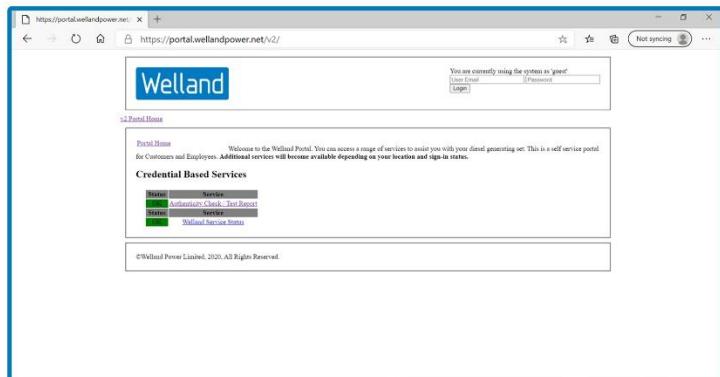
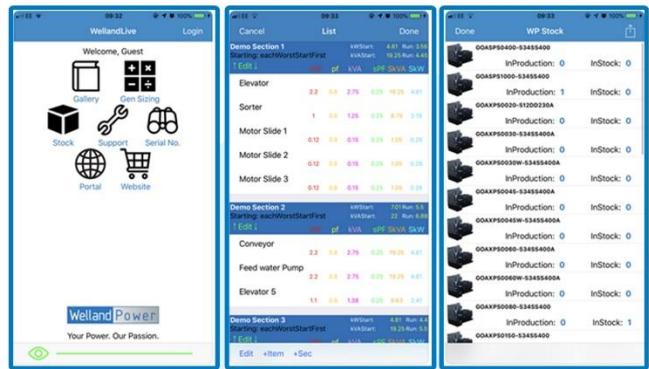
Useful Information

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

	WP350	WP400	WP450	WP500	WP500E2
DSE BATTERY CHARGER	STANDARD	STANDARD	STANDARD	STANDARD	STANDARD
TROPICAL RADIATOR	STANDARD	STANDARD	STANDARD	STANDARD	STANDARD
FIRST FILL (OIL & COOLANT)	STANDARD*	STANDARD*	STANDARD*	STANDARD*	STANDARD*
DSE7320 MKII CONTROL MODULE	STANDARD	STANDARD	STANDARD	STANDARD	STANDARD
SINGLE SKIN BASE TANK	STANDARD	STANDARD	STANDARD	STANDARD	STANDARD
BUNDED BASE TANK	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
GLOW PLUGS	N/A	N/A	N/A	N/A	N/A
ENGINE COOLANT HEATER	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
LOW WATER LEVEL SWITCH	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
CE UPGRADE	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
ELECTRONIC GOVERNOR	STANDARD	STANDARD	STANDARD	STANDARD	STANDARD
SUMP DRAIN KIT	STANDARD	STANDARD	STANDARD	STANDARD	STANDARD
SUMP DRAIN PUMP	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
430 STAINLESS CANOPY	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
ANTI CONDENSATION HEATER	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
THERMISTORS	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
PMG UPGRADE	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
DROOP CT	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
CIRCUIT BREAKER	630A MCCB	630A MCCB	800A MCCB	800A MCCB	800A 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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Welland Power Diesel Generators



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