



WP350-WP660, Three Phase, 350-720kVA

Strong, Corrosion Resistant Construction

- High quality base, coated and protected with a modern corrosion resistant finish, for excellent long-term resilience.
- High quality, ISO R898 Structural Bolts, zinc coated for excellent corrosion resistance.
- S275 steel, laser cut and CNC formed.
- This product is ONLY produced in the UK, using UK sourced steel produced to BS, EN and ISO standards.

High Quality Power on Demand

- Remote start control panel as standard produced using a UK made DSE 7000 series control module optional.
- Our units offer not only excellent ratings aligned with key power nodes, but high quality power, excellent reactive power availability, high overload capability and a wide range of options available on all Stamford alternators.

Transportation

- Unit is forklift-ready, allowing easy positioning on site.
- Strong and sturdy feet and base for excellent transportability, movement and long term strength.
- Optional central lifting point.

Quality Materials And Workmanship

- Engineered from design to assembly by our dedicated team, we provide exceptional solutions to your needs.
- Welded tank, excellent capacity.
- UK suppliers are subjected to extensive checks within our ISO 9001 framework.
- In house laser cutting and sheet metal facility allows production to the highest possible standards.

Safety, Security and Environmental

- Radiator fan and battery charging alternator fully guarded.
- High quality roof mounted silencer for operator safety.
- Alternator moving parts fully guarded to prevent injury.
- Alternative engine options available, allowing certification against the requirements of EU Stage IIIA (Directives 97/68/EC, as last amended) for mobile applications.

Servicing and Support

- Replaceable element fuel and air filters, full flow spin on oil filters.
- Spares available usually next day.
- High quality support for technical issues.
- International Perkins / Stamford Warranty.

Every Welland Power Generator Is Made In The UK.

Standard Features

- Heavy duty Perkins engine.
- Manuals and circuit wiring diagrams.
- UK assembly in our ISO 9001 facility.
- Test and Pre Delivery Inspection Check
- Deep Sea Electronics 7x20 controller.

Additional Options

- A range of sound attenuated enclosures.
- Higher specification control panels.
- Additional alarms and shutdowns
- A selection of exhaust silencer noise levels.
- Wired for Cold Start / Engine Heater.

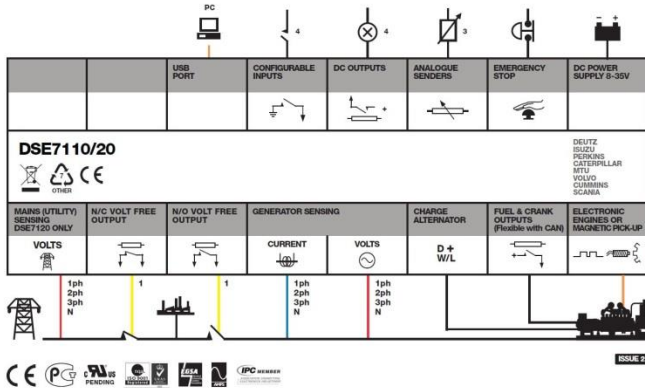
Power You Control



Global solutions for power requirements come from global companies. With over 60 years' experience producing generators for sale in over 100 countries; we can assist you to meet your power requirement, on time and on budget.

Based on the proven UK made Perkins diesel engine, coupled to a Stamford alternator, a UK made Deep Sea 7000 series controller gives outstanding monitoring and features. Deep Sea Control modules are a "must have" feature for all segments of the generator market.

COMPREHENSIVE FEATURE LIST TO SUIT A WIDE VARIETY OF GEN-SET APPLICATIONS



The DSE 7000 series controllers have a range of advanced features, expansion boards and configuration options to suit the most demanding applications. A rugged, modern design with a proven track record enables you to meet your power requirement each and every time.

With a huge range of options and accessories, alternative and custom builds we offer a unit to suit your requirements. Upgrade controllers for enhanced metering, remote monitoring and synchronising control. We offer synchronising systems for up to 32 generators and mains synchronising for peak lopping, no break return and STOR applications.

See our control panel guide for more details.

Shutdowns and Protections

- Low Oil Pressure Shutdown
- High Engine Temperature Shutdown
- Under Voltage Warning / Shutdown
- Over Voltage Warning / Shutdown
- Over speed / Over Frequency
- Under speed / Under Frequency
- Over Crank / Fail to Start Alarm
- Over Current Alarms

Monitoring and Control

- Manual and Automatic Modes
- Three phase voltage monitoring
- Three phase current monitoring
- Frequency monitoring
- Start, Crank, Crank Rest, Warm Up Timers
- Return and Cool down timers
- Battery under / Over voltage alarms
- Exercise Scheduler

Generator Ratings Data (Standby / Prime)

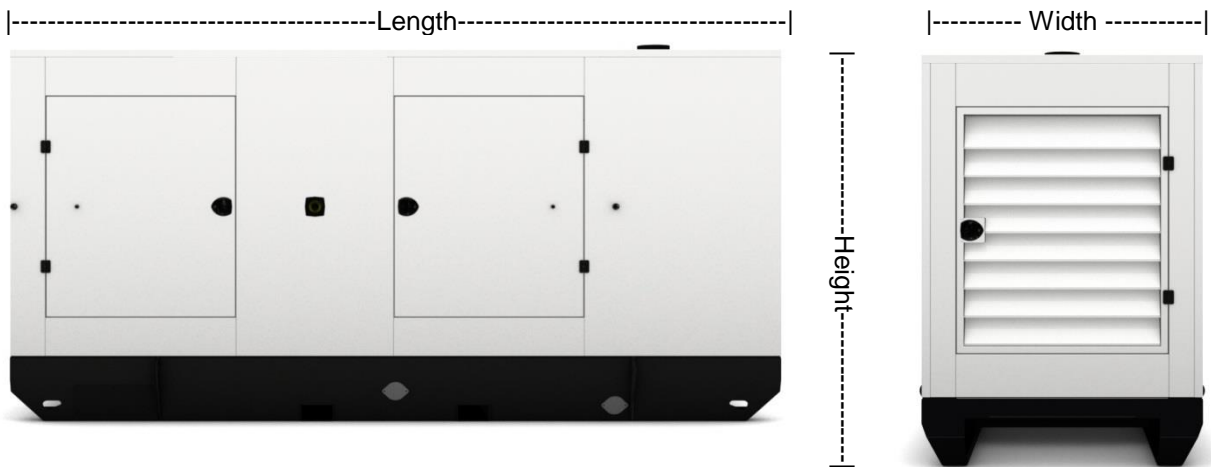
Model	Gross Engine Power	Net Engine Power	Alternator Efficiency at full rated load	Available Active Power	Power Factor	kVA Rating
	kW	kW	%	kW	ϕ	kVA
Three Phase Models						
WP350E	368 / 324	349 / 305	93.4	304 / 280	0.8	380 / 350
WP400E	412 / 368	392 / 349	93.4	340 / 320	0.8	425 / 400
WP450E	451 / 412	434 / 396	93.8	407 / 371	0.8	509 / 464
WP500E	495 / 451	478 / 435	93.8	416 / 400	0.8	520 / 500
WP600E	592 / 539	574 / 522	94.8	532 / 488	0.8	665 / 610
WP660E	628 / 584	609 / 565	94.9	578 / 536	0.8	722 / 670

Engine Advanced Technical Data

Model	Engine Make	Engine Model	Induction	Cooling	Governor Type/Class	Compression Ratio	Displacement	Charging Alternator Arms	Oil Capacity (L)	Exhaust Gas Temperature (Deg. C)
WP350E	Perkins	2206A-E13TAG2	Turbo Charged	Water Cooled	Electronic	16.3 : 1	12.5	70	40	630
WP400E	Perkins	2206A-E13TAG3			Electronic	16.3 : 1	12.5	70	40	630
WP450E	Perkins	2506A-E15TAG1			Electronic	16 : 1	15.2	70	62	550
WP500E	Perkins	2506A-E15TAG2			Electronic	16 : 1	15.2	70	62	550
WP600E	Perkins	2806A-E18TAG1A			Electronic	14.5 : 1	18.1	70	62	571
WP660E	Perkins	2806A-E18TAG2			Electronic	14.5 : 1	18.1	70	62	555

Model	Alternator Make	Alternator Model	Bearings	Winding Pitch	Wires	AVR Model	Voltage Regulation	Total Harmonic Content (%)	Short Circuit Capacity	Reactance's %		
										Xd	X'd	X''d
WP350E	Stamford	S4L1D-E41	1	2/3	12	AS440	± 1%	<5%	300%	328	18	13
WP400E		S4L1D-F41				AS440	± 1%	<5%		328	18	13
WP450E		S4L1D-G41				AS440	± 1%	<5%		288	15	11
WP500E		HCI 544C				AS440	± 1%	<5%		262	14	10
WP600E		HCI 544E				AS440	± 1%	<5%		288	15	11
WP660E		HCI544F				AS440	± 1%	<5%		262	14	10

Radio interference suppression that meets or exceeds EU standard EN61000-6. Voltage regulation at steady state. Total Waveform distortion at full load.



Dimensions, Weights and Fuel Consumption

Model	Canopied Dimensions				All Units				Open Set Dimensions			
	Length (mm)	Width (mm)	Height (mm)	Weight (KG)	Tank Capacity (Litres) Canopy / Open	Fuel Consumption (L / hr)			Length (mm)	Width (mm)	Height (mm)	Weight (KG)
						110 %	100 %	75 %				
Three Phase Models												
WP350E	4900	1820	2463	5027	630 L	80	77	54	3150	1170	1750	3495
WP400E	4900	1820	2463	5163	630 L	90	89	81	3150	1170	1750	3660
WP450E	4900	1820	2463	5421	630 L	104	95	72	3391	1410	1970	4120
WP500E	4900	1820	2463	5421	630 L	111	100	76	3391	1410	1970	4350
WP600E	4900	2170	2463	6318	630L	134	123	90	3700	1410	1970	4120
WP660E	4900	2170	2463	6460	630L	142	131	99	3700	1410	1970	4320

While every effort is made to maintain these specifications, in line with our policy of continuous improvement we reserve the right to change the specification without notice. If any part of this specification is critical to your application, please ensure you confirm it with your sales engineer prior to placing an order. Some items shown on this specification sheet may be non-standard. Some features shown on this leaflet may be optional at additional cost. Please confirm all options required with a sales agent prior to placing an order.



Optional 4900 Canopy Specification

Strong, Corrosion Resistant Construction

- UK sourced steel sheet Polyester powder coated at over 200 Degrees C prevents corrosion.
- Black zinc die cast hinges on doors tested and proven to withstand extremely corrosive conditions

Maintenance And Access

- Unit has 980mm doors for excellent access.
- Removable Doors, modular bolt together design.
- Radiator fills easily with ample space.
- Oil Drain and Radiator Drain available as options.

Quality materials and workmanship

- Welded roof and doors for excellent finish.
- Reinforced ridged doors for enhance strength.
- High quality adjustable handles.
- UK Made control panel and control cables.

Safety and Security

- Fully lockable canopy.
- Security bolts to prevent unauthorised access.
- Canopy shields hot engine parts.
- Emergency Stop Button fitted as standard.

The Welland sound attenuated enclosures reduce sound levels to comply with the stage 2 levels of the European Community Directive 2000/14/EC

Sound Pressure Levels, CP3000 Enclosure

Model	Rating	LWA	15m		7m		1m	
			75%	100%	75%	100%	75%	100%
3 Phase Generators								
WP350E	Prime		66.1	66.8	72.9	73.2	83.5	84.6
	Standby		66.2	66.9	73.0	73.4	83.7	84.7
WP400E	Prime		66.1	66.9	72.9	73.4	83.6	84.7
	Standby		66.4	67.3	73.2	73.6	83.7	84.8
WP450E	Prime						79.7	80.8
	Standby						80.1	81.4
WP500E	Prime						80.2	81.1
	Standby						81.1	82.1
WP600E	Prime						80.6	81.4
	Standby						81.4	82.2
WP660E	Prime						80.9	81.7
	Standby						81.8	82.0

Sound pressure Level figures are provisional. For verification of a particular figure, please contact sales.

Your Local Welland Power Dealer:

WWW.WELLANDPOWER.NET

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