

Perkins Powered Generating Sets 7.5 to 2200 kVA



FW Power is a leading supplier of Engines and Generators. All of our Generators are manufactured in the UK using only the highest quality component suppliers. Each manufacturer offers global warranties and aftermarket support through an experienced network of distributors and dealers. All Generators are extensively tested ensuring optimum performance, high reliability and low service intervals. **FW Power** offers complete project packages from ex-works supply to multi-set synchronising design build systems that use diesel, gas and CHP Generators.

Engine, Baseframe and Radiator:

- Perkins water cooled diesel engine naturally aspirated or turbo charged, governing to ISO8528-5 class G2/G3.
- Mechanical, electronic or electronic engine management system (see scope of supply).
- Replaceable filter elements for fuel, oil and air.
- 12 or 24 volt DC electrical system (see scope of supply).
- Heavy duty tropical radiator complete with fan and stone-guards.
- 8 hour capacity base fuel tank with steel wire braided fuel lines (optional above PFW 900).
- Built in anti-vibration mounts to PFW 800.
- Yuasa brand lead acid batteries.
- Industrial exhaust silencer with flexible bellows supplied loose.
- Full set of user manuals.
- Standard ISO8528 factory test.

Alternator:

- Single bearing close coupled alternator.
- Class H tropical insulation system.
- Brushless, self exciting with solid state AVR.
- Voltage regulation to within 1.5% at full load.
- Fully enclosed to IP 23 with drip proof air ducts.

Rating Definitions:

Prime Power: Variable Load: Unlimited hours usage with an average load factor of 70% of the published prime power rating over each 24 hour period. A 10% overload is available for 1 hour in every 12 hours of operation.

Standby Power: Variable Load: Limited to 500 hours annual usage up to 300 hours of which may be continuous running. No overload permitted.

Ratings are at 0.8 power factor three phase; 1.0 power factor single phase: To ISO 8528 -1, ISO 3046, BS 5514 and DIN 6271, 25°C (77°F) air inlet temperature, 99kPA barometric pressure (110m (361ft) altitude) and 30% relative humidity. Derating may be required for conditions outside these parameters.

Control Panel and Circuit Breaker:

- Set mounted Auto Mains (utility) Failure control module fitted as standard.
- Start / stop / auto / manual selection.
- Low oil pressure, high engine temperature and over-speed protection as standard.
- Configurable generator maintenance intervals to maximise engine performance.
- Seven configurable inputs.
- Eight configurable outputs.
- Configurable timers and alarms.
- Event log of fault, time and date.
- USB connectivity.
- Panel manufactured to BS EN 60950, BS EN 61000-6-2 and 4 BS EN 60068 2-1 / 2-2 / 2-6 / 2-27.
- 1A – 8,000A primary rating, 5A secondary rating.
- 3 pole MCB / MCCB / ACB (see scope of supply).

Acoustic Enclosure (Optional):

- Bolted construction.
- Barafoam acoustic insulation material.
- Lockable hinged doors.
- Centre point lift to 350 kVA, 4 point canopy lift above 350 kVA.
- Gloss powder coat paint finish.



FW Power Perkins Powered Generating Sets Summary Data Sheet

(Contact **FW Power** for Newage Stamford alternators)



Generator Model	kVA		Engine Data					Alternator Model	Open Generator				Silent Generator				
	Prime Power	Standby Power	Model	Arrangement	Displ (Litres)	Aspiration	Fuel Cons (Litres/hr)		Length (cm)	Width (cm)	Height (cm)	Weight (Kg)	Type	Length (cm)	Width (cm)	Height (cm)	Weight (Kg)
<i>Single Phase Generators</i>																	
PFW 8S	8	-	403D-11G	3 In-Line	1.1	Natural	3.0	ECO3-2L	115	56	108	390	Canopy	160	73	118	650
PFW 12S	11.5	-	403D-15G	3 In-Line	1.5	Natural	3.7	ECO28-1L	115	56	117	470	Canopy	160	73	118	730
PFW 18S	18	-	404D-22G	4 In-Line	2.2	Natural	5.3	ECO28-VL	132	56	122	560	Canopy	160	73	118	820
PFW 21S	21	-	1103A-33G	3 In-Line	3.3	Natural	6.3	ECO32-2S	147	70	136	800	Canopy	181	76	135	1100
PFW 28S	28	-	1103A-33G	3 In-Line	3.3	Natural	7.1	ECO32-1L	147	70	136	800	Canopy	181	76	135	1100
PFW 40S	40	-	1103A-33TG1	3 In-Line	3.3	Turbo	9.5	ECO32-3L	158	70	136	960	Canopy	231	78	141	1350
<i>Three Phase Generators</i>																	
PFW 9	9	10	403D-11G	3 In-Line	1.1	Natural	3.0	EC03-1L	115	56	108	390	Canopy	160	73	118	650
PFW 13	13	14	403D-15G	3 In-Line	1.5	Natural	3.7	EC03-2L	115	56	117	470	Canopy	160	73	118	730
PFW 20	20	22	404D-22G	4 In-Line	2.2	Natural	5.3	EC03-1L	132	56	122	560	Canopy	160	73	118	820
PFW 25	25	27.5	1103A-33G	3 In-Line	3.3	Natural	6.3	ECO28-2L	147	70	136	800	Canopy	181	76	135	1100
PFW 30	30	32.5	1103A-33G	3 In-Line	3.3	Natural	7.1	ECO22-2S	147	70	136	800	Canopy	181	76	135	1100
PFW 40	40	44	1103A-33TG1	3 In-Line	3.3	Turbo	9.5	ECO32-3S	158	70	136	960	Canopy	231	78	141	1350
PFW 45	45	49.5	1103A-33TG1	3 In-Line	3.3	Turbo	10.7	ECO32-1L	158	70	136	960	Canopy	231	78	141	1350
PFW 60	60	66	1103A-33TG2	3 In-Line	3.3	Turbo	14.1	ECO32-2L	163	70	144	960	Canopy	231	78	141	1350
PFW 65	65	71	1104A-44TG1	4 In-Line	4.4	Turbo	14.8	ECO32-3L	180	70	148	960	Canopy	277	86	156	1500
PFW 80	80	88	1104A-44TG2	4 In-Line	4.4	Turbo	18.7	ECP34-1S	180	70	148	1080	Canopy	277	86	156	1545
PFW 100	100	110	1104C-44TAG2	4 In-Line	4.4	Turbo A	22.6	ECP34-2S	186	72	149	1130	Canopy	277	86	156	1595
PFW 140	140	154	1006TAG	6 In-Line	6.0	Turbo A	31.5	ECP34-2L	231	77	158	1310	Canopy	290	95	190	1830
PFW 150	150	164	1006TAG2	6 In-Line	6.0	Turbo A	41.0	ECP34-2L	231	77	158	1350	Canopy	290	95	190	1870
PFW 180	180	196	1106C-E66TAG4	6 In-Line	6.6	Turbo A	40.2	ECO38-1S	236	79	170	1590	Canopy	345	115	187	2150
PFW 200	200	220	1306C-E87TAG3	6 In-Line	8.7	Turbo A	45.2	ECO38-2S	254	86	187	1830	Canopy	345	115	247 ⁽⁴⁾	2390
PFW 225	225	250	1306C-E87TAG4	6 In-Line	8.7	Turbo A	43.0	ECO38-3SN	254	86	187	1920	Canopy	345	115	247 ⁽⁴⁾	2480
PFW 250	250	275	1306C-E87TAG6	6 In-Line	8.7	Turbo A	48.0	ECO38-1LN	254	86	187	1920	Canopy	345	115	247 ⁽⁴⁾	2480
PFW 300	300	330	2206A-E13TAG2	6 In-Line	12.5	Turbo A	60.0	ECO38-2LN	318	113	215	3580	Canopy	528	165	240	4900
PFW 350	350	370	2206A-E13TAG2	6 In-Line	12.5	Turbo A	71.0	ECO38-3LN	318	113	215	3580	Canopy	528	165	240	4900
PFW 400	400	437	2206A-E13TAG3	6 In-Line	12.5	Turbo A	81.0	ECO40-1S	318	113	215	3700	Canopy	528	165	240	5020
PFW 450	450	491	2506A-E15TAG1	6 In-Line	15.2	Turbo A	95.0	ECO40-2S	340	113	222	3900	Canopy	438	125	227	4900
PFW 500	500	546	2506A-E15TAG2	6 In-Line	15.2	Turbo A	106.0	ECO40-3S	340	113	222	3900	Canopy	438	125	227	4900
PFW 600	600	660	2806A-E18TAG1A	6 In-Line	18.0	Turbo A	130.0	ECO40-1.5L	340	154	227	4700	Canopy	438	165	229	5800
PFW 650	650	710	2806A-E18TAG2	6 In-Line	18.0	Turbo A	138.0	ECO40-2L	340	154	227	4700	Canopy	438	165	229	5800
PFW 745	745	815	4006C-23TAG2A	6 In-Line	23.0	Turbo A	149.0	HCI634G	397	171	232	6350	Canopy ⁽²⁾	810	210	300	8200
PFW 800	800	850	4006C-23TAG3A	6 In-Line	23.0	Turbo A	164.0	HCI634G	397	171	232	6350	Canopy ⁽²⁾	810	210	300	8200
PFW 910	910	1000	4008TAG1A	8 Vee	30.0	Turbo A	195.0	HCI634H	465	205	227	7500	Canopy ⁽²⁾	895	257	299	10000
PFW 1000	1000	1100	4008TAG2A	8 Vee	30.0	Turbo A	220.0	HCI634J	465	205	227	7500	Canopy ⁽²⁾	895	257	299	10000
PFW 1250	1250	1350	4012-46TWG2A	12 Vee	46.0	Turbo W	259.0	PI734A/B	473	178	245	8900	Container	12000	2438	2890	⁽³⁾
PFW 1360 ⁽¹⁾	1360	1500	4012-46TWG3A	12 Vee	46.0	Turbo W	283.0	PI734B	473	198	245	9000	Container	12000	2438	2890	⁽³⁾
PFW 1500 ⁽¹⁾	1500	1650	4012-46TAG2A	12 Vee	46.0	Turbo A	268.0	PI734C	499	219	251	10000	Container	12000	2438	2890	⁽³⁾
PFW 1700	1700	1870	4012-46TAG3A	12 Vee	46.0	Turbo A	370.0	PI734E	510	216	281	10600	Container	12000	2438	2890	⁽³⁾
PFW 1840 ⁽¹⁾	1840	2024	4016TAG1A	16 Vee	61.0	Turbo A	408.0	PI734E	571	278	351	13200	Container	12000	2438	2890	⁽³⁾
PFW 2000 ⁽¹⁾	2000	2200	4016TAG2A	16 Vee	61.0	Turbo A	439.0	PI734F	571	278	351	13200	Container	12000	2438	2890	⁽³⁾

Ratings are for 50 Hz, 380 - 415 volts three phase and 220 - 240 volts single phase.

⁽¹⁾ Standby kVA's for 380 volts are approximately 3% lower than published, please contact **FW Power**.

⁽²⁾ Optional container available (30 ft PFW 745/800, 40 ft PFW 910/1000).

⁽³⁾ Please contact **FW Power**.

⁽⁴⁾ 187 Without silencer fitted.

Turbo A - Turbocharged, air to air aftercooler / Turbo W - Turbocharged, air to water aftercooler.

Fuel consumption is based upon prime power at 100 % load. (Fuel consumption will vary depending upon fuel specific gravity and quality).

Issue 2.0 All products and specifications are subject to manufacturers variations. Information in **FW Power** data sheets is for guidance only.

FW Power Perkins Powered Generators Scope of Supply with 7120 and 7220 Control Panels	PFW 9 to PFW 80	PFW 100	PFW 140 PFW 150	PFW 180	PFW 200 to PFW 500	PFW 600 PFW 650	PFW 730 PFW 800	PFW 900 PFW 1000	PFW 1250 to PFW 1700	PFW 1840 PFW 2000
Tropical Radiator	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Temperate Radiator	-	-	-	-	-	-	OPT	OPT	OPT	-
Fan Guard	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Radiator Matrix Guard	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Air, Fuel and Oil Filters	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Governor Type	MECHANICAL	ELECTRONIC	ELECTRONIC	ECU	ECU	ECU	ELECTRONIC	ELECTRONIC	ELECTRONIC	ELECTRONIC
DC System 12/24V	12 V	12 V	12 V	12 V	24 V	24 V	24 V	24 V	24 V	24 V
Low Oil Protection	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
High Engine Temperature Protection	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Overspeed Protection	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Low Coolant Level Protection	OPT	OPT	STD	STD	STD	STD	STD	STD	STD	STD
High Exhaust Temperature	-	-	-	-	-	-	OPT	OPT	STD	STD
DC Wiring	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Baseframe Without Fuel Tank	-	-	-	-	-	-	-	STD	STD	STD
8 Hour Capacity Base Fuel Tank	STD	STD	STD	STD	STD	STD	STD	OPT	OPT	OPT
Steel Wire Braided Fuel Lines	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Fuel Contents Gauge	STD	STD	STD	STD	STD	STD	STD	OPT	OPT	OPT
Anti Vibration Mounts Between Generator and Baseframe	STD	STD	STD	STD	STD	STD	STD	-	-	-
Anti Vibration Mounts Under Baseframe	-	-	-	-	-	-	-	STD	STD	STD
Yuasa Brand Lead Acid Battery	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Exhaust Flexible Section	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Industrial Exhaust Silencer	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Standard ISO8528 Works Test	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Standard Paint Finish	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
User Manual	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Control Panel Mounted on Anti Vibration Mounts	STD									
DSE Control Panel	7120					7220				
Monitoring	LCD DISPLAY									
Start / Stop / Auto / Manual Selection	VIA SOFT TOUCH MEMBRANE BUTTONS ON PANEL FASCIA									
Generator Amps	STD									
Generator Volts	STD									
Generator Frequency	STD									
Engine Speed	STD									
Engine Oil Pressure	STD									
Engine Water Temperature	STD									
Battery Volts	STD									
Mains Volts	STD									
Mains Frequency	STD									
Hours Run	STD									
Generator kVA	-					STD				
Generator kW	-					STD				
Generator Power Factor	-					STD				
Generator kVA _r , kWh, kVA _h , kVA _{rh}	-					STD				
DSE Contant Potential Battery Charger with On / Off Switch	OPTIONAL					STD (5 AMP)				
3 Pole MCB / MCCB / ACB	PLEASE REFER TO NOTE BELOW									
Overspeed Protection	STD									
Low Coolant Level Protection	OPTIONAL		STD							
High Engine Temperature Protection	STD									
Low Oil Pressure Protection	STD									
Charge Fail Indication	STD									
Event Logging	STD									
Engine Exercise Mode	STD									
Maintenance Scheduling	STD									
Emergency Stop Button	STD									
RS232 / RS485	STD									

Amps (Prime Power)	Guide to Control Panel and Circuit Breaker
Upto 250 A	Alternator mounted panel with MCB/MCCB internally mounted (MCB fitted upto 100 Amps)
250 - 913 A	Alternator mounted panel with alternator mounted MCCB
914 A to 1600 A	Alternator mounted panel with MCCB optional (set mounted)
Over 1600 A	Alternator mounted panel with ACB optional (freestanding cubicle)

Issue 2.0 All products and specifications are subject to manufacturers variations. Information in **FW Power** data sheets is for guidance only.