FW Power
Generator and engine specialists

MTU Powered Generating Sets
450 to 3180 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:

- MTU water cooled diesel engine turbo charged, governing to ISO8528-5 class G3.
- Electronic engine management system.
- Replaceable filter elements for fuel, oil and air.
- 24 volt DC electrical system.
- Heavy duty tropical radiator complete with fan and stone-guards.
- Fuel feed and return lines to baseframe. (Optional free standing fuel tank).
- Anti-vibration mounts included.
- Heavy duty lead acid batteries.
- Industrial exhaust silencer with flexible bellows supplied loose.
- Full set of user manuals.
- Standard ISO8528 factory test.

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 MCCB / ACB (see scope of supply).

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.

Acoustic Enclosure (Optional):

- Contact ***FW Power.***

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.

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FW Power MTU Powered Generating Sets Summary Data Sheet

Generator Model	kVA		Engine Data					Alternator Model	Open Generator				Silent Generator				
	Prime Power	Standby Power	Model	Arrangement	Displ (Litres)	Aspiration [2]	Fuel Cons (Litres/hr)		Length (cm)	Width (cm)	Height (cm)	Weight (Kg)	Type	Length (cm)	Width (cm)	Height (cm)	Weight (Kg)
MFW 450	450	TBC	10V1600G10F	10 Vee	17.5	Turbo	103.0	Newage Stamford	Contact ***FW Power***								
MFW 500	500	TBC	10V1600G20F	10 Vee	17.5	Turbo	111.0	Newage Stamford	Contact ***FW Power***								
MFW 600	600	TBC	12V1600G10F	12 Vee	21.0	Turbo	123.0	Newage Stamford	Contact ***FW Power***								
MFW 655	655	TBC	12V1600G20F	12 Vee	21.0	Turbo	130.0	Newage Stamford	Contact ***FW Power***								
MFW 780	780	850	12V2000G65	12 Vee	23.9	Turbo	169.0	Newage Stamford	Contact ***FW Power***								
MFW 910	910	1000	16V2000G25	16 Vee	31.8	Turbo	186.0	Newage Stamford	Contact ***FW Power***								
MFW 1100	1000	1100	16V2000G65	16 Vee	31.8	Turbo	205.0	Newage Stamford	Contact ***FW Power***								
MFW 1615 [1]	1615	1715	12V4000G23	12 Vee	57.2	Turbo	359.0	Newage Stamford	Contact ***FW Power***								
MFW 1810 [1]	1810	1975	12V4000G63	12 Vee	57.2	Turbo	413.0	Newage Stamford	Contact ***FW Power***								
MFW 2000 [1]	2020	2165	16V4000G23	16 Vee	76.3	Turbo	454.0	Newage Stamford	Contact ***FW Power***								
MFW 2290 [1]	2290	2515	16V4000G63	16 Vee	76.3	Turbo	513.0	Newage Stamford	Contact ***FW Power***								
MFW 2590	2590	2850	20V4000G23	20 Vee	95.4	Turbo	517.0	Newage Stamford	Contact ***FW Power***								
MFW 2840	2840	3124	20V4000G63	20 Vee	95.4	Turbo	563.0	Newage Stamford	Contact ***FW Power***								
MFW 2895 [1]	2895	3180	20V4000G63L	20 Vee	95.4	Turbo	599.0	Newage Stamford	Contact ***FW Power***								

Ratings are for 50 Hz, 380 - 415 volts three phase.

[1] Ratings are for 380 volts, 400 and 415 volt ratings are higher, please contact ***FW Power.***

[2] All engines turbo charged with charge air cooling.

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 **MTU Powered Generators Scope of Supply with 7120 and 7220 Control Panels**	**MFW 450 MFW 500**	**MFW 600 MFW 655**	**MFW 780**	**MFW 910 MFW 1000**	**MFW 1615 MFW 1810**	**MFW 2020 MFW 2290**	**MFW 2590 MFW 2840 MFW 2895**
Tropical Radiator	STD	STD	STD	STD	STD	STD	STD
Temperate Radiator	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Fan Guard	STD	STD	STD	STD	STD	STD	STD
Radiator Matrix Guard	STD	STD	STD	STD	STD	STD	STD
Air, Fuel and Oil Filters	STD	STD	STD	STD	STD	STD	STD
Governor Type	ECU	ECU	ECU	ECU	ECU	ECU	ECU
DC System 12/24V	24 V	24 V	24 V	24 V	24 V	24 V	24 V
Low Oil Protection	STD	STD	STD	STD	STD	STD	STD
High Engine Temperature Protection	STD	STD	STD	STD	STD	STD	STD
Overspeed Protection	STD	STD	STD	STD	STD	STD	STD
Low Coolant Level Protection	STD	STD	STD	STD	STD	STD	STD
High Exhaust Temperature	TBA	TBA	TBA	TBA	TBA	TBA	TBA
DC Wiring	STD	STD	STD	STD	STD	STD	STD
Baseframe Without Fuel Tank	STD	STD	STD	STD	STD	STD	STD
Free Standing Fuel Tank	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Fuel Lines to Edge of Base Frame	STD	STD	STD	STD	STD	STD	STD
Fuel Contents Gauge	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anti Vibration Mounts Between Generator and Baseframe	TBA	TBA	TBA	TBA	TBA	TBA	TBA
Anti Vibration Mounts Under Baseframe	TBA	TBA	TBA	TBA	TBA	TBA	TBA
Hewavy Duty Lead Acid Battery	STD	STD	STD	STD	STD	STD	STD
Exhaust Flexible Section	STD	STD	STD	STD	STD	STD	STD
Industrial Exhaust Silencer	STD	STD	STD	STD	STD	STD	STD
Standard ISO8528 Works Test	STD	STD	STD	STD	STD	STD	STD
Standard Paint Finish	STD	STD	STD	STD	STD	STD	STD
User Manual	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 kVAr, kWh, kVAh, kVArh	-		STD				
DSE Contant Potential Battery Charger with On / Off Switch	OPTIONAL		STD (5 AMP)				
3 Pole MCCB / ACB	PLEASE REFER TO NOTE BELOW						
Overspeed Protection	STD						
Low Coolant Level Protection	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)