

Diesel Generating Set

FE-DW680

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	MODEL	FE-DW680		
	Standby Power (50Hz)	675KW / 748KVA		
	Prime Power (50Hz)	544KW / 680KVA		

Standard Features

General Features:

- Engine (DOOSAN DP222LB)
- Radiator 40°C max, fans are driven by belt, with safety guard
- 24V charge alternator
- Alternator: single bearing alternator IP21, insulation class H/H
- Absorber
- Dry type air filter, double fuel filter, oil filter, coolant filter
- Main line circuit breaker
- Standard control panel
- Two12V batteries, rack and cable
- Ripple flex exhaust pipe, exhaust siphon, flange, muffler
- User manual



Generator Ratings

Voltage	HZ	Phase	P.F (COS¢)	Standby Amps	Standby Ratings (KW/KVA)	Prime Ratings (KW/KVA)
440/254	50	3	0.8	997	675/748	544/680
415/240	50	3	0.8	1057	675/748	544/680
400/230	50	3	0.8	1097	675/748	544/680
380/220	50	3	0.8	1155	675/748	544/680

Prime Power (PRP): Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820-97 (eqv ISO8528); A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation.

Standby Power Rating (ESP): The standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload, utility parallel or negotiated outage operation capability is available at this rating.



ENGINE DATA

Manufacturer / Model: DOOSAN DP222LB, 4-cycle

Air Intake System: Turbo, Air/Air cooling

Fuel System: BOSCH P type fuel pump

Cylinder Arrangement: 12 in "v"

Displacement: 21.927L

Bore and Stroke: 128×142 (mm)

Compression Ratio: 15

Rated RPM: 1500rpm

Max. Standby Power at Rated RPM: 664KW/903HP

Governor Type: Electronic

Exhaust System

Exhaust Gas Flow: $101 \text{m}^3/\text{min}$ Exhaust Temperature: $481\,^{\circ}\text{C}$

Max Back Pressure: 5.9kPa

Air Intake System

Max Intake Restriction: 6.23kPa

Consumption: 42.2m³/min

Air Flow: 860m³/min

Fuel System

100%(Standby Power) Load: 147.1L/h

75%(Standby Power) Load: 109.2L/h

50%(Standby Power) Load: 73L/h

Oil System

Total Oil Capacity: 40L

Oil Consumption: ≤575g/h

Engine Oil Tank Capacity: 27L

Cooling System

Total Coolant Capacity: 114L

Thermostat: $71-85^{\circ}$ C

Max Water Temperature: 103°C



ALTERNATOR SPECIFICATION

GENERAL DATA

Compliance with GB755, BS5000, VDE0530, NEMAMG1-22, IED34-1, CSA22.2 and AS1359 standards.

Alternator Data

Number of Phase: 3

Connecting Type: 3 Phase and 4 Wires, "Y" type connecting

Number of Bearing: 1

Power Factor: 0.8
Protection Grade: IP21

Altitude: ≤1000m

Exciter Type: Brushless, self-exciting

Insulation Class, Temperature Rise: H/H

Telephone Influence Factor (TIF): <50

THF: <2%

Alternator Capacity: 750KVA
Alternator Efficiencies: 93.3%

GENERATING SET DATA

Voltage Regulation: ≥±5%

Voltage Regulation, Stead State: ≤±1%

Sudden Voltage Warp (100% Sudden Reduce): ≤+25%

Sudden Voltage Warp (Sudden Increase): ≤-20%

Voltage Stable Time (100% Sudden Reduce): ≤6S

Voltage Stable Time (Sudden Increase) ≤6S

Frequency Reduce: ≤5% Adjustable

Frequency Waving: ≤0.5%

Sudden Frequency Warp (100% Sudden Reduce): ≤+12%

Sudden Frequency Warp (Sudden Increase): ≤-10%

Frequency Recovery Time (100% Sudden Reduce): ≤5S

Frequency Recovery Time (Sudden Increase): ≤5S



Standard Features

- Standard Auto Control System
- Starting batteries
 (Maintenance-Free &
 Watering-Free) with connective wires
- ♦ Documents

- ♦ MCCB
- ♦ Oil Drain Valve
- ♦ One set of fuel filter / oil filter
- Exhaust System(including until muffler)

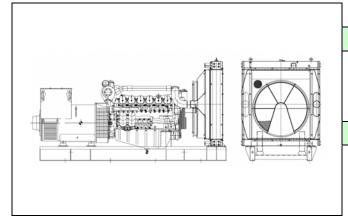
Options

- ♦ Base Fuel Tank
- ♦ Daily Fuel Tank
- ♦ Battery Charger
- ♦ Engine Heater
- ♦ Alternator Heater

- Permanent Magnet Generator(PMG)
- ♦ Rainproof Type
- ♦ Soundproof Type
- ♦ Trailer Type
- Water Separator

- ♦ Remote Control Panel
- ♦ Automatic Transfer Switch
- ♦ Paralleling System
- ♦ Switch box
- ♦ Spare Parts

Dimension & Weight



Standard Configuration (Open Type)

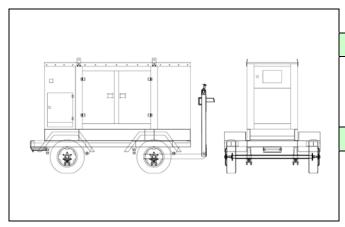
Overall Size:3480 (mm) ×1390 (mm) ×1820 (mm)

Weight: 4500kg

With Base Fuel Tank

Overall Size:3480 (mm) ×1390 (mm) ×1950 (mm)

Weight: 4550kg



Soundproof Type

Overall Size:5030 (mm) ×1660 (mm) ×2250 (mm)

Weight: 6000kg

Trailer Type

Overall Size:5840 (mm) ×2540 (mm) ×3100 (mm)

Weight: 7700kg





Standard Control **Panel** uses micro processing technique integrating digital, intelligent and network techniques which can carry out functions including auto start/stop, data measure, alarming. The controller uses LCD display, optional English display interface with operation easy and reliable. It can be widely used in all types of generator automatic control system for compact structure, advanced circuits, simple connections and high reliability

Auto Module Control Panel



Auto Module Control Panel is the configuration for nobody on duty controlling generators. This kind of panel adopts auto module control system, with large LCD display to show the menu.

Features: MRS10-can receive remote output signal from ATS and realize auto start and stop of generators.

MRS16-can realize all functions of MRS10, add RS232 interface which can communicate with PC to realize remote operation.

AMF25-Auto Mains Failure controller, can realize all functions of MRS16, furthermore can detect ATS and control directly.

Auto Parallel Control Panel



Automatic Parallel Control Panel This new automatic parallel system adopts intelligent modules, inserted and folded installed, no need the peripheral relay and logic circuit. The main switch adopts electronic breaker or frame breaker, combined together with the generator, which is very reliable. One generator, one panel. The panel can be used both for singly and parallel. It is only need to parallel generator with such panel when the capability needs to be enlarged in the future.