



DESCRIPTIVE

- Electronic governor
- Mechanically welded chassis with antivibration suspension
- Main line circuit breaker
- Radiator for wiring temperature of 48/50°C max with mechanical fan
- Protective grille for fan and rotating parts
- 9 dB(A) silencer supplied separately
- Charger DC starting battery with electrolyte
- 12 V charge alternator and starter
- Delivered with oil and coolant -30°C
- Manual for use and installation

POWER DEFINITION

PRP : Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO 8528-1.

ESP : The standby power rating is applicable for supplying emergency power in variable load applications in accordance with ISO 8528-1.

Overload is not allowed

TERMS OF USE

According to the standard, the nominal power assigned by the genset is given for 25°C Air Inlet Temperature, of a barometric pressure of 100 kPa (100 m A.S.L), and 30 % relative humidity. For particular conditions in your installation, refer to the derating table.

ASSOCIATED UNCERTAINTLY

For the generating sets used indoor, where the acoustic pressure levels depends on the installation conditions, it is not possible to specify the ambient noise level in the exploitation and maintenance instructions . You will also find in our exploitation and maintenance instructions a warning concerning the air noise dangers and the need to implement appropriated preventive measures.

JD275M

Engine type	6081HF001 / 6090HF475
Alternator type	ECO38 1LN/4
Performance class	G3

GENERAL CHARACTERISTICS

Frequency (Hz)	50
Reference voltage (V)	400/230
Max power ESP (kVA)	275
Max power ESP (kWe)	220
Max power PRP (kVA)	250
Max power PRP (kWe)	200
Intensity (A)	397
Standard Control Panel	6110
Optional control panel	4520

DIMENSIONS AND NOISE LEVELS

DIMENSIONS COMPACT VERSION

Length (mm)	2900
Width (mm)	1300
Height (mm)	1697
Dry weight (kg)	2135
Tank capacity (L)	390



GENERAL CHARACTERISTICS

Voltage	ESP		PRP		Standby Amps
	kWe	kVA	kWe	kVA	
415/240	211	264	192	240	367
400/230	220	275	200	250	397
380/220	220	275	200	250	418
240/120	211	264	192	240	635
230/115	220	275	200	250	690
220/110	220	275	200	250	722
200/115	220	275	200	250	794

GENERAL ENGINE DATAS

Engine model	JOHN DEERE 6081 / 6090, 4- temps, Turbo , Air/Air DC 6 X
Cylinder arrangement	L
Displacement (C.I.)	9L
Bore (mm) x Stroke (mm)	116 x 129
Compression ratio	15.7:1
Speed (RPM)	1500
Pistons speed (m/s)	6.45
Maximum stand-by power at rated RPM (kW)	240
Frequency regulation (%)	+/- 0.5%
BMEP (bar)	26.66
Governor type	Electronic

COOLING SYSTEM

Radiator & Engine capacity (L)	40
Max water temperature (°C)	105
Outlet water temperature (°C)	93
Fan power (kW)	7
Fan air flow w/o restriction (m3/s)	5.5
Available restriction on air flow (mm EC)	20
Type of coolant	Gencool
Thermostat (°C)	82-94

EMISSIONS

Emission PM (mg/Nm3)	0.1
Emission CO (mg/Nm3)	0.51
Emission HCNOx (g/kWh)	3.73
Emission HC (mg/Nm3)	0.11

EXHAUST

Exhaust gas temperature (°C)	587
Exhaust gas flow (L/s)	740
Max. exhaust back pressure (mm EC)	750

FUEL PRIME RATING

Consumption @ 110% load (Kg/h)	56.6
Consumption @ 100% load (Kg/h)	50.7
Consumption @ 75% load (Kg/h)	38.1
Consumption @ 50% load (Kg/h)	25.2
Maximum fuel pump flow (Kg/h)	203

OIL

Oil capacity (L)	35
Min. oil pressure (bar)	1.9
Max. oil pressure (bar)	2.6
Oil consumption 100% load (L/h)	0.17
Carter oil capacity (L)	34

HEAT BALANCE

Heat rejection to exhaust (kW)	N/A
Radiated heat to ambient (kW)	N/A
Heat rejection to coolant (kW)	112+40.4

AIR INTAKE

Max. intake restriction (mm EC)	375
Intake air flow (L/s)	378.33



GENERAL DATAS

Alternator brand	Meccalte
Alternator type	ECO38 1LN/4
Number of phase	3
Power factor (Cos Phi)	0.8
Altitude (m)	0 à 1000
Overspeed (rpm)	2250
Number of pole	4
Excitation system	Brushless
Insulation class / T° class, continuous 40°C	H / H / 125°K
Regulation	DSR
Harmonic factor, no load TGH/THC (%)	<2.5
Wave form : NEMA=TIF-(TGH/THC)	<50
Wave form : CEI=FHT-(TGH/THC)	<2
Number of bearing	1
Coupling	Direct
Voltage regulation at established rating (%)	+/- 0.5%
Recovery time (Delta U = 20% transient) (ms)	500 ms

OTHER DATAS

Continuous Nominal Rating 40°C (kVA)	250
Standby Rating 27°C (kVA)	275
Efficiencies 4/4 load (%)	93
Air flow (m3/s)	0.43
Short circuit ratio (Kcc)	0.48
Direct axis synchro reactance unsaturated (Xd) (%)	294
Quadra axis synchro reactance unsaturated (Xq) (%)	176
Open circuit time constant (T'do) (ms)	2175
Direct axis transient reactance saturated (X'd) (%)	13.5
Short circuit transient time constant (T'd) (ms)	100
Direct axis subtransient reactance saturated (X''d) (%)	8.1
Subtransient time constant (T''d) (ms)	10
Quadra axis subtransient reactance saturated (X''q) (%)	10
Zero sequence reactance unsaturated (Xo) (%)	0.7
Negative sequence reactance saturated (X2) (%)	9.1
Armature time constant (Ta) (ms)	15
No load excitation current (io) (A)	1.1
Full load excitation current (ic) (A)	3.9
Full load excitation voltage (uc) (V)	33
Recovery time (Delta U = 20% transient) (ms)	500 ms
Engine start (Delta U = 20% perm. or 50% trans.) (kVA)	538
Transient dip (4/4 load) - PF : 0,8 AR (%)	14.6
No load losses (W)	4340
Heat rejection (W)	16810



DEEP SEA PLC 6110, comprehensive and simple



The 6110 is a versatile control unit allowing operation in manual or automatic mode. Equipped with an LCD screen, the user-friendly 6110 offers high-quality basic functions to guarantee simple, reliable operation of your generating set.

Offers the following functions:

Standard electrical measurements: voltmeter, frequency meter, ammeter.

Engine parameters: working hours counter, engine speed, battery voltage, fuel level.

Alarms and faults: oil pressure, coolant temperature, failure to start, overspeed (> 60 kVA), charging alternator fault, low fuel level, emergency stop.

For more information, please refer to the sales documentation.

DEEP SEA 4520, ergonomic and user-friendly



The highly versatile 4520 control unit is complex yet accessible, thanks to the particular attention paid to optimising its ergonomics and ease of use. With its large display screen, buttons and scroll wheel, it places the accent on simplicity and communication.

The 4520 offers the following functions:

Electrical measurements: voltmeter, frequency meter, ammeter.

Engine parameters: working hours counter, oil pressure, coolant temperature, fuel level, engine speed, battery voltage.

Alarms and faults: oil pressure, coolant temperature, failure to start, overspeed, alternator min./max., battery voltage min./max., emergency stop, fuel level.

Ergonomics: wheel for navigating around the various menus.

Communication: remote control and operation software, USB connections, PC connection.

For more information on the product and its options, please refer to the sales documentation.