

PRIMAX®



JD330M

Engine type	6090HF475
Alternator type	ECO38 2LN/4
Performance class	G3

GENERAL CHARACTERISTICS

Frequency (Hz)	50
Reference voltage (V)	400/230
Max power ESP (kVA)	330
Max power ESP (kWe)	264
Max power PRP (kVA)	300
Max power PRP (kWe)	240
Intensity (A)	476
Standard Control Panel	610
Optional control panel	620

DIMENSIONS AND NOISE LEVELS

DIMENSIONS COMPACT VERSION

Length (mm)	2900
Width (mm)	1300
Height (mm)	1697
Dry weight (kg)	2235
Tank capacity (L)	390

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 Intlet 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 UNCERTAINTY

For the generating sets used indoors, 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.

GENERAL CHARACTERISTICS

Voltage	ESP		PRP		Standby Amps
	kWe	kVA	kWe	kVA	
415/240	264	330	240	300	460
400/230	264	330	240	300	476
380/220	264	330	240	300	501
240 TRI	264	330	240	300	793
230 TRI	264	330	240	300	828
220 TRI	264	330	240	300	866
220/127	260	324	236	295	852
200/115	264	330	240	300	952

GENERAL ENGINE DATAS

Engine model	JOHN DEERE 6090HF475 , 4- temps, Turbo , Air/Air DC 6 X
Cylinder arrangement	L
Displacement (C.I.)	8.98
Bore (mm) x Stroke (mm)	118.4 x 136
Compression ratio	16.0:1
Speed (RPM)	1500
Pistons speed (m/s)	6.45
Maximum stand-by power at rated RPM (kW)	270
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)	15.2
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)	916.67
Max. exhaust back pressure (mm EC)	1000

FUEL PRIME RATING

Consumption @ 110% load (Kg/h)	61.9
Consumption @ 100% load (Kg/h)	54.7
Consumption @ 75% load (Kg/h)	43.2
Consumption @ 50% load (Kg/h)	29.3
Maximum fuel pump flow (Kg/h)	204

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 2LN/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)	300
Standby Rating 27°C (kVA)	330
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



HARSEN 610, comprehensive and simple



The 610 is a versatile control unit allowing operation in manual or automatic mode. Equipped with an LCD screen, the user-friendly 610 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 4610, ergonomic and user-friendly



The highly versatile 620 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 620 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.