J200K

Engine JOHN DEERE , 6068HF120-183
Alternator LEROY SOMER , LSA462M3

STANDARD FEATURES

- Mechanical governor
- Mechanically welded chassis with vibration isolators
- Main line circuit breaker
- Radiator for wiring T°of 50°C [122°F] max with mechanical fan
- Protective grille for fan and rotating parts
- 9dB(A) silencer supplied separately
- Charged DC starting battery with electrolyte + cables
- 12 V charging alternator and starter
- Supplied with oil and coolant -30°C
- User manual and commissioning guide

Voltage	Power ESP kWe/kVA	Power PRP kWe/kVA	Standby Amps	Dimensions	Weight
415/240	160 / 200	145 / 182	278		
400/230	160 / 200	145 / 182	289	Length: 2370mm [93in] Width: 1114mm [44in] Heigth: 1480mm [58in]	1730kg [3813lbs] Net 2070kg [4562lbs] Gross
380/220	160 / 200	145 / 182	304		
240/120	160 / 200	145 / 182	481		
230/115	160 / 200	145 / 182	502		
220/110	160 / 200	145 / 182	525		
200/115	160 / 200	145 / 182	577		

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. A 10% overload capability is available for a period of 1 hour within 12-hour period of operation, in accordance with ISO 3046-1 –

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.

TERM OF USE

Standard reference conditions 25 **°C** Air Intlet Temp, **2300** m A.S.L. 60 % relative humidity. All engine performance data based on the above mentioned maximum continuous ratings.

	Type	dB(A)@1m	dB(A)@7m	Dimensions	Weight	Tank
	M226	79.4	69	Length: 3508mm [138in] Width: 1200mm [47in] Heigth: 1830mm [72in]	2320kg [5113lbs] Net 2670kg [5885lbs] Gross	340 L

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ENGINE SPECIFICATIONS

STANDARD FEATURES	Manufacturer / Model	JOHN DEERE 6068HF120-183 , 4-strokes, Turbo , Air/Air DC 6 X
	Cylinder Arrangement	L
	Displacement	6.72L [410.1C.I.]
	Bore and Stroke	106mm [4.2in.] X 127mm [5.0in.]
	Compression ratio	17:1
	Rated RPM	1500 Rpm
	Piston Speed	6.35m/s [20.8ft./s]
	Max. stand by Power at rated RPM	180kW [241BHP]
	Frequency regulation, steady state	+/-2. 5%
	BMEP	19.4bar [281psi]
	Governor : type	Meca
EXHAUST SYSTEM	Exhaust temperature	565°C [1049°F]
	Exhaust gas flow	457L/s [968cfm]
	Max back pressure	750mm CE [30in. WG]
FUEL SYSTEM	110% (Stand By power)	45.2L/h [11.9gal/hr]
	100% (of the Prime Power)	40.8L/h [10.8gal/hr]
	75% (of the Prime Power)	31.3L/h [8.3gal/hr]
	50% (of the Prime Power)	20.5L/h [5.4gal/hr]
	Max. fuel pump flow	108L/h [28.5gal/hr]
OIL SYSTEM	Total oil capacity w/filters	31.5L [8.3gal]
	Oil Pressure low idle	1bar [14.5psi]
	Oil Pressure rated RPM	5bar [72.5psi]
	Oil consumption 100% load	0.052L/h [0.0gal/hr]
	Oil capacity carter	32L [8.5gal]
THERMAL BALANCE	Heat rejection to exhaust	138kW [7847Btu/mn]
	Radiated heat to ambiant	23kW [1308Btu/mn]
	Heat rejection to coolant	76kW [4321Btu/mn]
AIR INTAKE	Max. intake restriction	625mm CE [25in. WG]
	Engine air flow	205L/s [434cfm]
COOLANT SYSTEM	Radiator & engine capacity	25.8L [6.8gal]
	Max water temperature	105°C [221°F]
	Outlet water temperature	93°C [199°F]
	Fan power	3 kW
	Fan air flow w/o restriction	4.6m3/s [9748cfm]
	Available restriction on air flow	20mm CE [0.8in. WG]
	Type of coolant	Gencool
	Thermostat	82-94 °C
EMISSIONS LEVEL	PM	80 mg/Nm3
	CO	180 mg/Nm3
	Nox	2400 mg/Nm3
	HC	15 mg/Nm3

ALTERNATOR SPECIFICATIONS

GENERAL DATAS	Manufacturer / Type	LEROY SOMER LSA462M3
	Number of phase	3
	Power factor (Cos Phi)	0.8
	Altitude	< 1000 m
	Overspeed	2250 rpm
	Pole : number	4
	Exciter type	SHUNT
	Insulation : class, temperature rise	H / H
	Voltage regulator	R230
	Sustained short circuit current	4 AC
	Total harmonics (TGH/THC)	< 4%
	Wave form : NEMA = TIF – TGH/THC	< 50
	Wave form : CEI = FHT – TGH/THC	< 2%
	Bearing : number	1
	Coupling	Direct
	Voltage regulation 0 to 100% load	+/- 1%
	Recovery time (20% Volt dip) ms	< 500 ms
	SkVA with 90% of nominal sustained voltage (at 0.4PF)	N/A
OTHER DATAS	Continuous nominal rating @ 40°C	180 kVA
	Standby rating @ 27°C	203 kVA
	Efficiencies @ 4/4 load	91.7 %
	Air flow	0.43m3/s [911.11cfm]
	Short circuit ratio;50 (Kcc)	0.44
	Direct axis synchro reactance unsaturated (Xd)	312 %
	Quadra axis synchro reactance unsaturated (Xq)	187 %
	Open circuit time constant;50 (T'do)	1980 ms
	Direct axis transient reactance saturated (X'd)	15.8 %
	Short circuit transient time constant (T'd)	105 ms
	Direct axis subtransient reactance saturated (X''d)	9.5 %
	Subtransient time constant (T''d)	10 ms
	Quadra axis subtransient reactance saturated (X''q)	11.8 %
	Zero sequence reactance unsaturated (Xo)	0.5 %
	Negative sequence reactance saturated (X2)	10.7 %
	Armature time constant (Ta)	16 ms
	No load excitation current (io)	1.1 A
	Full load excitation current (ic)	N/A
	Full load excitation voltage (uc)	35 V
	Recovery time (Delta U = 20% transitoire)	< 500 ms
	Motor start (Delta = 20% perm. Or 50% trans.)	431 kVA
	Transient dip (4/4 charge) – PF : 1.8 AR	16.2 %
	No load losses	2.8kW [2.80Kw]
	Heat rejection	13 kW

CONTROL PANEL

Standard NEXYS

Specifications :
Frequency meter, Ammeter, Voltmeter
Alarms and faults Oil pressure, water temperature, Overcrank, Overspeed (>60 kVA), Min/max alternator, Low fuel level, Emergency stop
Engine parameters Hours counter, Engine speed, Battery voltage, Fuel level, AIr preheating

Option TELYS

Specifications :
Frequency meter, Ammeter, Voltmeter
Alarms and faults Oil pressure, water temperature, No start-up, Overspeed, Min/max alternator, Min/max battery voltage, Low fuel level, Emergency stop
Engine parameters Hours counter, Oil pressure, Water temperature, Engine speed, Battery voltage, Fuel level

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