

# J250U

Engine JOHN DEERE , 6081HF001  
Alternator LEROY SOMER , LSA462L9

## STANDARD FEATURES

- Mechanical governor
- Mechanically welded chassis with antivibration suspension
- Power 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
- 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
480/277	250 / 313	227 / 284	376	Length: 2900mm [114in] Width: 1300mm [51in] Height: 1697mm [67in]	2235kg [4927 lbs] Net 2635kg [5809 lbs] Gross
440/254	250 / 313	227 / 284	411		
380/220	250 / 313	227 / 284	476		
240/120	250 / 313	227 / 284	753		
230/115	250 / 313	227 / 284	786		
220/127	250 / 313	227 / 284	821		
208/120	250 / 313	227 / 284	869		
600/347	250 / 313	227 / 284	301		



## 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
 M227	82.5	72.5	Length: 4004mm [158in]	3215kg [7088lbs] Net	390 L
			Width: 1380mm [54in] Height: 2145mm [84in]	3625kg [7992lbs] Gross	
 M227-DW	82.5	72.5	Length: 4056mm [160in]	3692kg [8139lbs] Net	950 L
			Width: 1380mm [54in] Height: 2340mm [92in]	4662kg [10278lbs] Gross	





## ENGINE SPECIFICATIONS

STANDARD FEATURES	Manufacturer / Model	JOHN DEERE 6081HF001 , 4-strokes, Turbo , Air/Water SC 6 X
	Cylinder Arrangement	L
	Displacement	8.1L [494.3C.I.]
	Bore and Stroke	116mm [4.6in.] X 129mm [5.1in.]
	Compression ratio	15.7 : 1
	Rated RPM	1800 Rpm
	Piston Speed	7.74m/s [25.4ft./s]
	Max. stand by Power at rated RPM	268kW [359BHP]
	Frequency regulation, steady state	+/- 2.5%
	BMEP	19.8bar [287psi]
	Governor : type	MECA
EXHAUST SYSTEM	Exhaust temperature	514°C [957°F]
	Exhaust gas flow	842L/s [1784cfm]
	Max back pressure	750mm CE [30in. WG]
FUEL SYSTEM	110% (Stand By power )	73.7L/h [19.5gal/hr]
	100% (of the Prime Power)	61.6L/h [16.3gal/hr]
	75% (of the Prime Power)	46.1L/h [12.2gal/hr]
	50% (of the Prime Power)	31.8L/h [8.4gal/hr]
	Max. fuel pump flow	209L/h [55.2gal/hr]
OIL SYSTEM	Total oil capacity w/filters	32L [8.5gal]
	Oil Pressure low idle	2.1bar [30.4psi]
	Oil Pressure rated RPM	2.75bar [39.8psi]
	Oil consumption 100% load	0.084L/h [0.022gal/hr]
	Oil capacity carter	31L [8.2gal]
THERMAL BALANCE	Heat rejection to exhaust	202kW [11486Btu/mn]
	Radiated heat to ambient	33kW [1876Btu/mn]
	Heat rejection to coolant	N/A
AIR INTAKE	Max. intake restriction	625mm CE [25in. WG]
	Engine air flow	307L/s [651cfm]
COOLANT SYSTEM	Radiator & engine capacity	40L [10.6gal]
	Max water temperature	105°C [221°F]
	Outlet water temperature	93°C [199°F]
	Fan power	10 kW
	Fan air flow w/o restriction	7m3/s [14834cfm]
	Available restriction on air flow	20mm CE [0.8in. WG]
	Type of coolant	Gencool
	Thermostat	82-94 °C
EMISSIONS LEVEL	PM	N/A
	CO	N/A
	Nox	N/A
	HC	N/A





## ALTERNATOR SPECIFICATIONS

GENERAL  DATAS	Manufacturer	LEROY SOMER
	Type	LSA462L9
	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
	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	343 kVA
	Standby rating @ 27°C	375 kVA
	Efficiencies @ 4/4 load	93.2 %
	Air flow	0.51m3/s [1080.62cfm]
	Short circuit ratio;50 (Kcc)	0.49
	Direct axis synchro reactance unsaturated (Xd)	290 %
	Quadra axis synchro reactance unsaturated (Xq)	174 %
	Open circuit time constant;50 (T'do)	2180 ms
	Direct axis transient reactance saturated (X'd)	13.3 %
	Short circuit transient time constant (T'd)	105 ms
	Direct axis subtransient reactance saturated (X''d)	8 %
	Subtransient time constant (T''d)	10 ms
	Quadra axis subtransient reactance saturated (X''q)	9.9 %
	Zero sequence reactance unsaturated (Xo)	0.4 %
	Negative sequence reactance saturated (X2)	8.9 %
	Armature time constant (Ta)	16 ms
	No load excitation current (io)	1.1 A
	Full load excitation current (ic)	3.8 A
	Full load excitation voltage (uc)	34 V
	Recovery time (Delta U = 20% transitoire)	< 500 ms
	Motor start (Delta = 20% perm. Or 50% trans.)	840 kVA
	Transient dip (4/4 charge) – PF : 1.8 AR	14.5 %
No load losses	6.6 kW	
Heat rejection	19 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

