

# J125UC3

Tiers 3

Engine JOHN DEERE , 6068HFS82  
 Alternator LEROY SOMER , LSA442M95

## STANDARD FEATURES

- Electronic 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	125 / 156	113 / 142	188	Length: 2370mm [93in] Width: 1114mm [44in] Height: 1480mm [58in]	1640kg [3616 lbs] Net 1990kg [4387 lbs] Gross
440/254	125 / 156	113 / 142	205		
240/120	125 / 156	113 / 142	375		
230/115	125 / 156	113 / 142	392		
220/127	125 / 156	113 / 142	409		
208/120	125 / 156	113 / 142	433		
600/347	125 / 156	113 / 142	150		



## 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 Inlet Temp, 3000 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	81.6	71.6	Length: 3508mm [138in] Width: 1200mm [47in] Height: 1830mm [72in]	2220kg [4894lbs] Net 2580kg [5688lbs] Gross	340 L
 M226-DW	81.6	71.6	Length: 3560mm [140in] Width: 1200mm [47in] Height: 2182mm [86in]	2598kg [5728lbs] Net 3491kg [7696lbs] Gross	868 L





## ENGINE SPECIFICATIONS

STANDARD FEATURES	Manufacturer / Model	JOHN DEERE 6068HFS82 , 4-strokes, Turbo , Air/Water SC 6 X
	Cylinder Arrangement	L
	Displacement	6.8L [415.0C.I.]
	Bore and Stroke	106mm [4.2in.] X 127mm [5.0in.]
	Compression ratio	19 : 1
	Rated RPM	1800 Rpm
	Piston Speed	7.62m/s [25.0ft./s]
	Max. stand by Power at rated RPM	147.00kW [197BHP]
	Frequency regulation, steady state	+/- 0.5%
	BMEP	17.35bar [251psi]
Governor : type	ELEC	
EXHAUST SYSTEM	Exhaust temperature	507°C [945°F]
	Exhaust gas flow	486.67L/s [1031cfm]
	Max back pressure	750mm CE [30in. WG]
FUEL SYSTEM	110% (Stand By power )	36.66L/h [9.7gal/hr]
	100% (of the Prime Power)	33.74L/h [8.9gal/hr]
	75% (of the Prime Power)	29.41L/h [7.8gal/hr]
	50% (of the Prime Power)	21.76L/h [5.7gal/hr]
	Max. fuel pump flow	89.76L/h [23.7gal/hr]
OIL SYSTEM	Total oil capacity w/filters	33L [8.7gal]
	Oil Pressure low idle	3.00bar [43.5psi]
	Oil Pressure rated RPM	3bar [43.5psi]
	Oil consumption 100% load	0.09L/h [0.024gal/hr]
	Oil capacity carter	32L [8.5gal]
THERMAL BALANCE	Heat rejection to exhaust	111.15kW [6320Btu/mn]
	Radiated heat to ambient	17.93kW [1019Btu/mn]
	Heat rejection to coolant	N/A
AIR INTAKE	Max. intake restriction	375mm CE [15in. WG]
	Engine air flow	193.33L/s [410cfm]
COOLANT SYSTEM	Radiator & engine capacity	25.8L [6.8gal]
	Max water temperature	110.00°C [230°F]
	Outlet water temperature	93°C [199°F]
	Fan power	8.09 kW
	Fan air flow w/o restriction	5.5m <sup>3</sup> /s [11655cfm]
	Available restriction on air flow	20mm CE [0.8in. WG]
	Type of coolant	Gencool
	Thermostat	82-95 °C
EMISSIONS LEVEL	PM	0.13 gr/bhp/h
	CO	0.98 gr/bhp/h
	HC/Nox	2.66 gr/bhp/h

This document is not contractual - The SDMO company reserves the right to modify any of the characteristics stated in this CD Rom without notice, in a constant effort to improve the quality of its products.

SDMO Industries – 12bis rue de la Villeneuve – CS 92848 – 29 228 BREST CEDEX 2

Tel +33 (0)2 98 41 41 41 – Fax : +33 (0)2 98 41 63 07 – [www.sdmo.com](http://www.sdmo.com)





## ALTERNATOR SPECIFICATIONS

GENERAL  DATAS	Manufacturer	LEROY SOMER
	Type	LSA442M95
	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)	< 2%
	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	+/- 0.5%
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	188 kVA
	Standby rating @ 27°C	206 kVA
	Efficiencies @ 4/4 load	92.3 %
	Air flow	0.44m <sup>3</sup> /s [932.30cfm]
	Short circuit ratio;50 (Kcc)	0.41
	Direct axis synchro reactance unsaturated (Xd)	331 %
	Quadra axis synchro reactance unsaturated (Xq)	198 %
	Open circuit time constant;50 (T'do)	2865 ms
	Direct axis transient reactance saturated (X'd)	11.5 %
	Short circuit transient time constant (T'd)	100 ms
	Direct axis subtransient reactance saturated (X''d)	6.9 %
	Subtransient time constant (T''d)	10 ms
	Quadra axis subtransient reactance saturated (X''q)	8.2 %
	Zero sequence reactance unsaturated (Xo)	0.2 %
	Negative sequence reactance saturated (X2)	7.6 %
	Armature time constant (Ta)	15 ms
	No load excitation current (io)	0.6 A
	Full load excitation current (ic)	2 A
	Full load excitation voltage (uc)	38 V
	Recovery time (Delta U = 20% transitoire)	500 ms
	Motor start (Delta = 20% perm. Or 50% trans.)	349.9 kVA
	Transient dip (4/4 charge) – PF : 1.8 AR	15.1 %
No load losses	3.87 kW	
Heat rejection	12.44 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

