

# J440K

Engine JOHN DEERE , 6125HF070-387  
Alternator LEROY SOMER , LSA472VS3

## 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
- 24 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	352 / 440	320 / 400	612	Length: 3160mm [124in] Width: 1340mm [53in] Height: 1790mm [70in]	3120kg [6878 lbs] Net 3600kg [7937 lbs] Gross
400/230	352 / 440	320 / 400	635		
380/220	352 / 440	320 / 400	669		
240/120	352 / 440	320 / 400	1059		
230/115	352 / 440	320 / 400	1105		
220/110	352 / 440	320 / 400	1155		
200/115	352 / 440	320 / 400	1270		



## 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, 2745 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
 M228	76.3	66.6	Length: 4475mm [176in]	4250kg [9370lbs] Net	470 L
			Width: 1410mm [56in] Height: 2430mm [96in]	4730kg [10428lbs] Gross	
 M228-DW	76.3	66.6	Length: 4527mm [178in]	4851kg [10695lbs] Net	1368 L
			Width: 1410mm [56in] Height: 2700mm [106in]	6129kg [13512lbs] Gross	





## ENGINE SPECIFICATIONS

STANDARD FEATURES	Manufacturer / Model	JOHN DEERE 6125HF070-387 , 4-strokes, Turbo , Air/Water SC 6 X
	Cylinder Arrangement	L
	Displacement	12.5L [762.8C.I.]
	Bore and Stroke	127mm [5.0in.] X 165mm [6.5in.]
	Compression ratio	17 : 1
	Rated RPM	1500 Rpm
	Piston Speed	8.25m/s [27.1ft./s]
	Max. stand by Power at rated RPM	379kW [508BHP]
	Frequency regulation, steady state	+/- 0.5%
	BMEP	24.77bar [359psi]
	Governor : type	ELEC
EXHAUST SYSTEM	Exhaust temperature	468°C [874°F]
	Exhaust gas flow	1080L/s [2289cfm]
	Max back pressure	750mm CE [30in. WG]
FUEL SYSTEM	110% (Stand By power )	87.45L/h [23.1gal/hr]
	100% (of the Prime Power)	81.01L/h [21.4gal/hr]
	75% (of the Prime Power)	59.44L/h [15.7gal/hr]
	50% (of the Prime Power)	40.44L/h [10.7gal/hr]
	Max. fuel pump flow	158L/h [41.7gal/hr]
OIL SYSTEM	Total oil capacity w/filters	40L [10.6gal]
	Oil Pressure low idle	1.38bar [20.0psi]
	Oil Pressure rated RPM	2.75bar [39.8psi]
	Oil consumption 100% load	0.12L/h [0.032gal/hr]
	Oil capacity carter	42L [11.1gal]
THERMAL BALANCE	Heat rejection to exhaust	292kW [16603Btu/mn]
	Radiated heat to ambient	47kW [2672Btu/mn]
	Heat rejection to coolant	N/A
AIR INTAKE	Max. intake restriction	625mm CE [25in. WG]
	Engine air flow	446L/s [945cfm]
COOLANT SYSTEM	Radiator & engine capacity	43.8L [11.6gal]
	Max water temperature	105°C [221°F]
	Outlet water temperature	94°C [201°F]
	Fan power	8 kW
	Fan air flow w/o restriction	6m3/s [12715cfm]
	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

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## ALTERNATOR SPECIFICATIONS

GENERAL  DATAS	Manufacturer	LEROY SOMER
	Type	LSA472VS3
	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	+/- 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	400 kVA
	Standby rating @ 27°C	430 kVA
	Efficiencies @ 4/4 load	93.1 %
	Air flow	0.9m3/s [1906.98cfm]
	Short circuit ratio;50 (Kcc)	0.29
	Direct axis synchro reactance unsaturated (Xd)	393 %
	Quadra axis synchro reactance unsaturated (Xq)	235 %
	Open circuit time constant;50 (T'do)	1771 ms
	Direct axis transient reactance saturated (X'd)	22.1 %
	Short circuit transient time constant (T'd)	100 ms
	Direct axis subtransient reactance saturated (X''d)	17.7 %
	Subtransient time constant (T''d)	10 ms
	Quadra axis subtransient reactance saturated (X''q)	23.9 %
	Zero sequence reactance unsaturated (Xo)	0.8 %
	Negative sequence reactance saturated (X2)	20.9 %
	Armature time constant (Ta)	15 ms
	No load excitation current (io)	0.9 A
	Full load excitation current (ic)	3.9 A
	Full load excitation voltage (uc)	39 V
	Recovery time (Delta U = 20% transitoire)	500 ms
	Motor start (Delta = 20% perm. Or 50% trans.)	729 kVA
	Transient dip (4/4 charge) – PF : 1.8 AR	17.6 %
	No load losses	5.15kW [5.15Kw]
Heat rejection	23.34 kW	



**CONTROL PANEL****Standard****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

