

# J130K

Engine JOHN DEERE , 6068TF220  
Alternator LEROY SOMER , LSA442S7

## 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	106 / 132	96 / 120	184	Length: 2370mm [93in] Width: 1114mm [44in] Height: 1480mm [58in]	1570kg [3460lbs] Net 1910kg [4210lbs] Gross
400/230	106 / 132	96 / 120	191		
380/220	106 / 132	96 / 120	201		
240/120	106 / 132	96 / 120	318		
230/115	106 / 132	96 / 120	331		
220/110	106 / 132	96 / 120	346		
220/127	106 / 132	96 / 120	346		
200/115	106 / 132	96 / 120	381		


## 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, 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	77.6	67.6	Length: 3508mm [138in]	2160kg [4761lbs] Net	340 L
			Width: 1200mm [47in] Height: 1830mm [72in]	2500kg [5510lbs] Gross	





## ENGINE SPECIFICATIONS

STANDARD FEATURES	Manufacturer / Model	JOHN DEERE 6068TF220 , 4-strokes, Turbo , N/A 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	117kW [157BHP]
	Frequency regulation, steady state	+/-2. 5%
	BMEP	12.8bar [185psi]
	Governor : type	Meca
EXHAUST SYSTEM	Exhaust temperature	561°C [1042°F]
	Exhaust gas flow	290L/s [615cfm]
	Max back pressure	750mm CE [30in. WG]
FUEL SYSTEM	110% (Stand By power )	29L/h [7.7gal/hr]
	100% (of the Prime Power)	26L/h [6.9gal/hr]
	75% (of the Prime Power)	18.5L/h [4.9gal/hr]
	50% (of the Prime Power)	13.5L/h [3.6gal/hr]
	Max. fuel pump flow	108L/h [28.5gal/hr]
OIL SYSTEM	Total oil capacity w/filters	21.5L [5.7gal]
	Oil Pressure low idle	1bar [14.5psi]
	Oil Pressure rated RPM	5bar [72.5psi]
	Oil consumption 100% load	0.029L/h [0.0gal/hr]
	Oil capacity carter	20.6L [5.4gal]
THERMAL BALANCE	Heat rejection to exhaust	94kW [5345Btu/mn]
	Radiated heat to ambient	14kW [796Btu/mn]
	Heat rejection to coolant	65kW [3696Btu/mn]
AIR INTAKE	Max. intake restriction	625mm CE [25in. WG]
	Engine air flow	135L/s [286cfm]
COOLANT SYSTEM	Radiator & engine capacity	27.3L [7.2gal]
	Max water temperature	105°C [221°F]
	Outlet water temperature	93°C [199°F]
	Fan power	3 kW
	Fan air flow w/o restriction	4.4m <sup>3</sup> /s [9324cfm]
	Available restriction on air flow	20mm CE [0.8in. WG]
	Type of coolant	Gencool
	Thermostat	82-94 °C
EMISSIONS LEVEL	PM	60 mg/Nm <sup>3</sup>
	CO	140 mg/Nm <sup>3</sup>
	Nox	3500 mg/Nm <sup>3</sup>
	HC	42 mg/Nm <sup>3</sup>



## ALTERNATOR SPECIFICATIONS

GENERAL  DATAS	Manufacturer / Type	LEROY SOMER LSA442S7
	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	1.9 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
Standby rating @ 27°C		132 kVA
Efficiencies @ 4/4 load		91.5 %
Air flow		0.37m3/s [783.98cfm]
Short circuit ratio;50 (Kcc)		0.34
Direct axis synchro reactance unsaturated (Xd)		349 %
Quadra axis synchro reactance unsaturated (Xq)		209 %
Open circuit time constant;50 (T'do)		2734 ms
Direct axis transient reactance saturated (X'd)		12.7 %
Short circuit transient time constant (T'd)		100 ms
Direct axis subtransient reactance saturated (X''d)		7.6 %
Subtransient time constant (T''d)		10 ms
Quadra axis subtransient reactance saturated (X''q)		9.2 %
Zero sequence reactance unsaturated (Xo)		0.3 %
Negative sequence reactance saturated (X2)		8.4 %
Armature time constant (Ta)		15 ms
No load excitation current (io)		0.5 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.)		320 kVA
Transient dip (4/4 charge) – PF : 1.8 AR		16.1 %
No load losses	1.97kW [1.97Kw]	
Heat rejection	8.84 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

