

# J88K

Engine JOHN DEERE , 4045TF220  
Alternator LEROY SOMER , LSA432L8

## STANDARD FEATURES

- Mechanic governor
- Mechanically welded chassis with antivibration suspension
- Main line circuit breaker
- Radiator for wiring temperature of 48/50°C max with mechanical fan
- Protective grille for fan and rotating parts
- 9 dB(A) silencer supplied separately
- Charger DC starting battery with electrolyte
- 12 V charge alternator and starter
- Delivered with oil and coolant -30°C
- Manual for use and installation



Voltage	Power ESP kWe/kVA	Power PRP kWe/kVA	Standby Amps	Dimensions	Weight
415/240	69 / 86	63 / 78	120		
400/230	70 / 88	64 / 80	127	Leng : 1870mm [74in]	1110kg [2447lbs] Net
380/220	68 / 85	62 / 77	129	Widt : 994mm [39in]	1310kg [2888lbs] Gross
240 TRI	70 / 88	64 / 80	212	Heig : 1360mm [54in]	
230 TRI	70 / 88	64 / 80	221		
220 TRI	70 / 88	64 / 80	231		
220/127	62 / 77	56 / 70	202		
200/115	70 / 88	64 / 80	254		



### 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.

**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 ESP/PRP 25 C°/25 C° Air Intlet Temp, 1000 m/1000 m m A.S.L. 60 % relative humidity.

	Model	dB(A)@1m	dB(A)@7m	Dimensions	Weight	Tank
	M128-DW	79.5	70	Leng : 2344mm [92in] Widt : 1060mm [42in] Heig : 1900mm [75in]	1717kg [3785lbs] 2107kg [4645lbs]	390 L
	M128	79.5	70	Leng : 2300mm [91in] Widt : 1060mm [42in] Heig : 1680mm [66in]	1530kg [3373lbs] 1730kg [3814lbs]	180 L



## ENGINE SPECIFICATIONS

DATA  GENERAL DATA	Motor model	JOHN DEERE 4045TF220 , 4-temps, TURBO , N/A 4 X
	Cylinder arrangement	L
	Displacement (C.l.)	4.48
	Bore (mm) X Stroke (mm)	106 X 127
	Compression ratio	17 : 1
	Speed (RPM)	1500
	Pistons speed (m/s)	6.35
	Maximum stand-by power at rated RPM (kW)	80
	Frequency regulation (%)	2.5
	BMEP (bar)	13.03
	Governor type	MECA
EXHAUST SYSTEM	Exhaust gas temperature (°F)	565
	Exhaust gas flow (L/s)	205
	Max. exhaust back pressure (mm CE)	750
FUEL SYSTEM	Consumption @ 110% load (L/h)	21.5
	Consumption @ 100% load (L/h)	19.5
	Consumption @ 75% load (L/h)	14
	Consumption @ 50% load (L/h)	10
	Maximum fuel pump flow (L/hr)	108
OIL	Oil capacity (L)	13.5
	Min. oil pressure (bar)	1
	Max. oil pressure (bar)	5
	Oil consumption 100% load (L/h)	0.019
	Carter oil capacity (L)	12.5
THERMAL BALANCE	Heat rejection to exhaust (kW)	65
	Radiated heat to ambient (kW)	9.5
	Heat rejection to coolant (kW)	43
AIR INTAKE	AIR INTAKE_entree_max%	625
	Intake air flow (L/s)	93
COOLANT SYSTEM	Radiator & Engine capacity (L)	23.6
	Max water temperature (°C)	105
	Outlet water temperature (°C)	93
	Fan power (kW)	2.5
	Fan air flow w/o restriction (m3/s)	3.37
	Available restriction on air flow (mm CE)	20
	Type of coolant	GENCOOL
	Thermostat (°C)	82-94
EMISSIONS	Emissions PM (g/kW.h)	N/A
	Emission CO (g/kW.h)	N/A
	Emissions HCNOx (g/kWh)	N/A
	Emission HC (g/kW.h)	N/A

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## ALTERNATOR SPECIFICATIONS

<b>DATA</b> <b>GENERAL DATA</b>	Alternator brand	LEROY SOMER
	Alternator	LSA432L8
	Number of phase	3
	Power factor (Cos Phi)	0.8
	Altitude (m)	<1000
	Overspeed (rpm)	2250
	Number of pole	4
	Excitation system	SHUNT
	Insulation class / Temperature class	H / H
	Regulation	R230
	Total harmonics TGH/THC	<2
	Wave form : NEMA=TIF-TGH/THC	<50
	Wave form : CEI=FHT-TGH/THC	<2
	Number of bearing	1
	Coupling	DIRECT
	Voltage regulation 0 à 100%	0.5
	Recovery time (Delta U = 20% transitoire) (ms)	500
<b>OTHER</b> <b>DATA</b>	Continuous Nominal Rating 40°C (kVA)	80
	Standby Rating 27°C (kVA)	88
	Efficiencies 4/4 load (%)	90.5
	Air flow (m3/s)	0.27
	Short circuit ratio (Kcc)	0.41
	Direct axis synchro reactance unsaturated (Xd) (%)	284
	Quadra axis synchro reactance unsaturated (Xq) (%)	170
	Open circuit time constant (T'do) (ms)	1431
	Direct axis transient reactance saturated (X'd) (%)	9.9
	Short circuit transient time constant (T'd) (ms)	50
	Direct axis subtransient reactance saturated (X''d) (%)	5
	Subtransient time constant (T''d) (ms)	5
	Quadra axis subtransient reactance saturated (X''q) (%)	6.3
	Zero sequence reactance unsaturated (Xo) (%)	0.1
	Negative sequence reactance saturated (X2) (%)	5.7
	Armature time constant (Ta) (ms)	8
	No load excitation current (io) (ms)	0.4
	Full load excitation current (ic) (A)	1.6
	Full load excitation voltage (uc) (A)	29
	Recovery time (Delta U = 20% transitoire) (ms)	500
	Motor start (Delta U = 20% perm. or 50% trans.) (ms)	213
	Transient dip (4/4 charge) - PF : 0,8 AR (%)	13.9
	No load losses (kW)	1.41
Heat rejection (kW)	6.64	

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## CONTROL PANEL

### Standard

### NEXYS



#### 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



#### 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