

Model: J130K

Engine: JOHN DEERE, 6068TF220

Alternator: LEROY SOMER, LSA442S7

Specifications

- Mechanical governor
- Mechanically welded chassis with anti-vibration 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



Generator Ratings

Voltage	Power ESP kW/kVA	Power RRP kW/kVA	Standby Amps	Dimensions	Weight
415/240	106 / 132	96 / 120	184	Length: 2370 Width: 1114 Height: 1480	1570kg Net 1910kg 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		

RRP: 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 12hour 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.

Terms of Use: Standard reference conditions 25 ° C Air Inlet Temp, 100m A.S.L 60%

relative humidity. All engine performance data based on the above mentioned continuous ratings.

Canopy Version

Type	dB(A)@7m	Dimensions	Weight	Tank
M226	67.6	Length: 3508 Width: 1200 Height: 1830	2160kg Net 2500kg Gross	340 L
M226-DW	67.6	Length: 3560 Width: 1200 Height: 2182	2560kg Net 3443kg Gross	868 L

All units supplied with canopy as standard except when requested.

Engine Data

Manufacturer/Model	JOHN DEERE 6068TF220, 4-strokes, Turbo
Cylinder arrangement	6 x 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. standby 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]
Total fuel 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 [0.008gal/hr]
Oil capacity carter	20.6L [5.4gal]

Thermal balance 100% load

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 ³ /s [9324cfm]
Available restriction on air flow	20mm CE [0.8in. WG]
Type of coolant	Gencool
Thermostat	82-94 °C

Emissions

PM	60 mg/Nm ³
CO	140 mg/Nm ³
Nox	3500 mg/Nm ³
HC	42 mg/Nm ³

Alternator Specifications

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	
TOTAL HARMONICS (TGH/THC)	< 2%
WAVE FROM : NEMA = TIF- TGH/THC	< 50
WAVE FROM: 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 NORMAL SUSTAINED VOLTAGE (AT 0.4PF)	[N/A]

Other Alternator Data

CONTINUOUS NOMINAL RATING @ 40° C	125 kVA
STANDBY RATING @ 27° C	138 kVA
EFFICIENCIES @ 4/4 LOAD	91.6 %
AIR FLOW	0.37m ³ /s [783.98cfm]
SHORT CIRCUIT RATIO: 50 (Kcc)	0.33
DIRECT AXIS SYNCHRO REACTANCE UNSATURATED (Xd)	363 %
QUADRA AXIS SYNCHRO REACTANCE UNSATURATED (Xq)	218 %
OPEN CIRCUIT TIME CONSTANT: 50 (T'do)	2734 ms
DIRECT AXIS TRANSIENT REACTANCE SATURATED (X'd)	13.2 %
SHORT CIRCUIT TRANSIENT TIME CONSTANT (T'd)	100 ms

Other Alternator Data Continued

DIRECT AXIS SUBTRANSIENT REACTANCE SATURATED (X'd)	7.9 %
SUBTRANSIENT TIME CONSTANT (T'd)	10 ms
QUADRA AXIS SUBTRANSIENT REACTANCE SATURATED (X'q)	9.6 %
ZERO SEQUENCE REACTACE UNSATURATED (X ₀)	0.7 %
NEGATIVE SEQUENCE REACTANCE SATURATED (X ₂)	8.8 %
ARMATURE TIME CONSTANT (T _a)	15 ms
NO LOAD EXCITATION CURRENT (i _o)	0.5 A
NO LOAD EXCITATION CURRENT (i _c)	2 A
FULL LOAD EXCITATION VOLTAGE (u _c)	36 V
RECOVERY TIME (DELTA U = 20% TRANSITOIRE)	500 ms
MOTOR START (DELTA = 20% PERM. OR 50% TRANS.)	243.9 kVA
TRANSIENT DIP (4/4 CHARGE) - PF : 1.8AR	16.6 %
NO LOAD LOSSES	1.97kW [1.97Kw]
HEAT REJECTION	9.41 kW