

Model: J165K

Engine: JOHN DEERE, 6068HF120-153

Alternator: LEROY SOMER, LSA442M95

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	128 / 160	116 / 145	223	Length: 2370 Width: 1114 Height: 1480	1640kg Net 1980kg Gross
400/230	132 / 165	120 / 150	238		
380/220	132 / 165	120 / 150	251		
240/120	132 / 165	120 / 150	397		
230/115	132 / 165	120 / 150	414		
220/110	132 / 165	120 / 150	433		
220/127	106 / 132	96 / 120	346		
200/115	132 / 165	120 / 150	476		

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	68.8	Length: 3508 Width: 1200 Height: 1830	2230kg Net 2580kg Gross	340 L
M226-DW	68.8	Length: 3560 Width: 1200 Height: 2182	2623kg Net 3506kg Gross	868 L

All units supplied with canopy as standard except when requested.

Engine Data

Manufacturer/Model	JOHN DEERE 6068HF120-153, 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	150kW [201BHP]
Frequency regulation, steady state	+/- 2.5%
BMEP	16.3bar [236psi]
Governor: type	MECA

Exhaust System

Exhaust temperature	555°C [1031°F]
Exhaust gas flow	385L/s [816cfm]
Max back pressure	750mm CE [30in. WG]

Fuel System

110% (Stand by power)	36.5L/h [9.6gal/hr]
100% (of the Prime Power)	33.5L/h [8.9gal/hr]
75% (of the Prime Power)	25L/h [6.6gal/hr]
50% (of the Prime Power)	17L/h [4.5gal/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	0.037L/h [0.010gal/hr]
Oil capacity carter	20.6L [5.4gal]

Thermal balance 100% load

Heat rejection to exhaust	99kW [5629Btu/mn]
Radiated heat to ambient	16kW [910Btu/mn]
Heat rejection to coolant	55kW [3127Btu/mn]

Air intake

Max. intake restriction	625mm CE [25in. WG]
Engine air flow	170L/s [360cfm]

Coolant system

Radiator & engine capacity	25.8L [6.8gal]
Max water temperature	105°C [221°F]
Outlet water temperature	93°C [199°F]
Fan power	3 kW
Fan air flow w/o restriction	4.44m ³ /s [9409cfm]
Available restriction on air flow	20mm CE [0.8in. WG]
Type of coolant	Gencool
Thermostat	82-94 °C

Emissions

PM	80 mg/Nm ³
CO	150 mg/Nm ³
Nox	2800 mg/Nm ³
HC	35 mg/Nm ³

Alternator Specifications

Manufacturer/Type	LEROY SOMER (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
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	150 kVA
STANDBY RATING @ 27° C	165 kVA
EFFICIENCIES @ 4/4 LOAD	92.2 %
AIR FLOW	0.37m ³ /s [783.98cfm]
SHORT CIRCUIT RATIO: 50 (Kcc)	0.42
DIRECT AXIS SYNCHRO REACTANCE UNSATURATED (Xd)	317 %
QUADRA AXIS SYNCHRO REACTANCE UNSATURATED (Xq)	190 %
OPEN CIRCUIT TIME CONSTANT: 50 (T'do)	2865 ms
DIRECT AXIS TRANSIENT REACTANCE SATURATED (X'd)	11 %
SHORT CIRCUIT TRANSIENT TIME CONSTANT (T'd)	100 ms

Other Alternator Data Continued

DIRECT AXIS SUBTRANSIENT REACTANCE SATURATED (X'd)	6.6 %
SUBTRANSIENT TIME CONSTANT (T'd)	10 ms
QUADRA AXIS SUBTRANSIENT REACTANCE SATURATED (X'q)	7.8 %
ZERO SEQUENCE REACTACE UNSATURATED (X ₀)	0.1 %
NEGATIVE SEQUENCE REACTANCE SATURATED (X ₂)	7.3 %
ARMATURE TIME CONSTANT (T _a)	15 ms
NO LOAD EXCITATION CURRENT (i ₀)	0.6 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.)	284.2 kVA
TRANSIENT DIP (4/4 CHARGE) - PF : 1.8AR	14.7 %
NO LOAD LOSSES	2.62kW [2.62Kw]
HEAT REJECTION	10.15 kW