

Model: J200K

Engine: JOHN DEERE, 6068HF120-183

Alternator: LEROY SOMER, LSA462M3

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	160 / 200	145 / 182	278	Length: 2370 Width: 1114 Height: 1480	1730kg Net 2070kg Gross
400/230	160 / 200	145 / 182	289		
380/220	160 / 200	145 / 182	304		
240/120	160 / 200	145 / 182	481		
230/115	160 / 200	145 / 182	502		
220/110	160 / 200	145 / 182	525		
200/115	160 / 200	145 / 182	577		

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	69	Length: 3508 Width: 1200 Height: 1830	2320kg Net 2670kg Gross	340 L
M226-DW	69	Length: 3560 Width: 1200 Height: 2182	2713kg Net 3596kg Gross	868 L

All units supplied with canopy as standard except when requested.

Engine Data

Manufacturer/Model	JOHN DEERE 6068HF120-183, 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	180kW [241BHP]
Frequency regulation, steady state	+/- 2.5%
BMEP	19.4bar [281psi]
Governor: type	MECA

Exhaust System

Exhaust temperature	565°C [1049°F]
Exhaust gas flow	457L/s [968cfm]
Max back pressure	750mm CE [30in. WG]

Fuel System

110% (Stand by power)	45.2L/h [11.9gal/hr]
100% (of the Prime Power)	40.8L/h [10.8gal/hr]
75% (of the Prime Power)	31.3L/h [8.3gal/hr]
50% (of the Prime Power)	20.5L/h [5.4gal/hr]
Total fuel flow	108L/h [28.5gal/hr]

Oil System

Total oil capacity w/filters	31.5L [8.3gal]
Oil Pressure low idle	1bar [14.5psi]
Oil Pressure rated RPM	5bar [72.5psi]
Oil consumption 100% load	0.052L/h [0.014gal/hr]
Oil capacity carter	32L [8.5gal]

Thermal balance 100% load

Heat rejection to exhaust	138kW [7847Btu/mn]
Radiated heat to ambient	23kW [1308Btu/mn]
Heat rejection to coolant	76kW [4321Btu/mn]

Air intake

Max. intake restriction	625mm CE [25in. WG]
Engine air flow	205L/s [434cfm]

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	4.6m ³ /s [9748cfm]
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	180 mg/Nm ³
Nox	2400 mg/Nm ³
HC	15 mg/Nm ³

Alternator Specifications

Manufacturer/Type	LEROY SOMER (LSA462M3)
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)	< 4%
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	+/- 1%
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	180 kVA
STANDBY RATING @ 27° C	203 kVA
EFFICIENCIES @ 4/4 LOAD	91.7 %
AIR FLOW	0.43m ³ /s [911.11cfm]
SHORT CIRCUIT RATIO: 50 (Kcc)	0.44
DIRECT AXIS SYNCHRO REACTANCE UNSATURATED (Xd)	312 %
QUADRA AXIS SYNCHRO REACTANCE UNSATURATED (Xq)	187 %
OPEN CIRCUIT TIME CONSTANT: 50 (T'do)	1980 ms
DIRECT AXIS TRANSIENT REACTANCE SATURATED (X'd)	15.8 %
SHORT CIRCUIT TRANSIENT TIME CONSTANT (T'd)	105 ms

Other Alternator Data Continued

DIRECT AXIS SUBTRANSIENT REACTANCE SATURATED (X'd)	9.5 %
SUBTRANSIENT TIME CONSTANT (T'd)	10 ms
QUADRA AXIS SUBTRANSIENT REACTANCE SATURATED (X'q)	11.8 %
ZERO SEQUENCE REACTACE UNSATURATED (X ₀)	0.5 %
NEGATIVE SEQUENCE REACTANCE SATURATED (X ₂)	10.7 %
ARMATURE TIME CONSTANT (T _a)	16 ms
NO LOAD EXCITATION CURRENT (i ₀)	1.1 A
FULL LOAD EXCITATION CURRENT (i _c)	4 A
FULL LOAD EXCITATION VOLTAGE (u _c)	35 V
RECOVERY TIME (DELTA U = 20% TRANSITOIRE)	500 ms
MOTOR START (DELTA = 20% PERM. OR 50% TRANS.)	431 kVA
TRANSIENT DIP (4/4 CHARGE) - PF : 1.8AR	16.2 %
NO LOAD LOSSES	2.8kW [2.80Kw]
HEAT REJECTION	13 kW