R200K DIESEL GENSET

MODEL	R200K
Stand-by Power @ 50Hz	*158 kW / 198 kVA*
Prime Power @ 50Hz	*144 kW / 180 kVA*

Standard Features

General features :

- Engine (JOHN DEERE, 6068HF120)
- Radiator 50°C [122°F]°C max. T° air inlet with coolant cap
- Charge alternator 12 V, Governor:Meca
- Alternator (LEROY SOMER, LSA462M3)
- Skid and vibration isolators
- Dry type air filter
- 4 poles circuit breaker
- Microprocessor control panel
- 12 V battery, rack and cable
- Soundproofed canopy
- User manual
- Terminal block

Picture with optional Telys

Generator Ratings

Voltage	HZ	Phase	P.F	Standby Amps	Standby Ratings [1] kW/kVA	Prime Ratings [2] kW/kVA
415/240	50	3	0.8	275	158 / 198	144 / 180
400/230	50	3	0.8	286	158 / 198	144 / 180
380/220	50	3	0.8	301	158 / 198	144 / 180
240/120	50	3	0.8	476	158 / 198	144 / 180
230/115	50	3	0.8	497	158 / 198	144 / 180
220/110	50	3	0.8	520	158 / 198	144 / 180
200/115	50	3	0.8	572	158 / 198	144 / 180

(1) PRP : Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO8528-1. A 10% overload capability is available for a period of 1 hour within 12-hour period of operation, in accordance with ISO 3046-1.
(2) ESP : The Standby Power Rating is applicable for supplying emergency power in variable load applications for up to 200 hours per year in accordance with ISO8528-1. Overload is not allowed.

Conditions of sale

- SDMO provides a full line of products with high quality recognized engines and alternators.
- Service and parts are available from SDMO distributors as a single source of responsibility.
- Each and every unit is factory tested. All generator sets are also prototype tested.
- One year limited warranty, please refer to the conditions terms. Five years extended are also available.

ENGINE DATA

Manufacturer / Model	JOHN DEERE 6068HF120 , 4-cycle, Turbo , Air/Air DC
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. stand by Power at rated RPM	150kW [201BHP]
Frequency regulation, steady state	+/-2. 5%
BMEP	16.3bar [236psi]
Governor : type	Meca
Exhaust System	
Exhaust gas flow	385L/s [816cfm]
Exhaust temperature	555°C [1031°F]
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 [0.0gal/hr]
Oil capacity carter	20.6L [5.4gal]
Thermal balance 100% load	
Heat rejection to exhaust	99kW [5629Btu/mn]
Radiated heat to ambiant	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	4.44m3/s [9409cfm]
Available restriction on air flow	20mm CE [0.8in. WG]
Type of coolant	Gencool
Thermostat	82-94 °C
Emissions	
HC	35 mg/Nm3
CO	150 mg/Nm3
Nox	2800 mg/Nm3
PM	80 mg/Nm3

ALTERNATOR SPECIFICATIONS

GENERAL DATA

- Compliance with NEMA MG21, UTE NF C51.111, VDE 0530, BS 4999, CSA standards.
- Vacuum-impregnated windings with epoxy varnish.
- IP23 drip proof.

ALTERNATOR DATA

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	AREP
Insulation : class, temperature rise	H / H
Voltage regulator	R448
Sustained short circuit current	N/A
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 0.4 PF)	500

OTHER ALTERNATOR DATA

Continuous nominal rating @ 40°C	180 kVA
Standby rating @ 27°C	190 kVA
Efficiencies @ 4/4 load	91.7 %
Air flow	0.43m3/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
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 reactance unsaturated (Xo)	0.5 %
Negative sequence reactance saturated (X2)	10.7 %
Armature time constant (Ta)	16 ms
No load excitation current (io)	1.1 A
Full load excitation current (ic)	4 A
Full load excitation voltage (uc)	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 : 1.8 AR	16.2 %
No load losses	2.8kW [2.80Kw]
Heat rejection	13 kW

Control Panels

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

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

Equipments

Terminal Block

- Internal access by door locked with a great connection area

Engine

- Oil drainage pump
- Battery cut-out

Fuel

- Pre-filter

Options

Engine and Radiator

- Heat hand protection
- Preheating
- Heavy duty air filter
- Battery charger

Alternator

- Oversized alternator
- Enforced impregnation

Exhaust

- Explosive atmosphere kit

Control panel / Power

- Automatic kit
- Electrical sockets
- Telys

Fuel

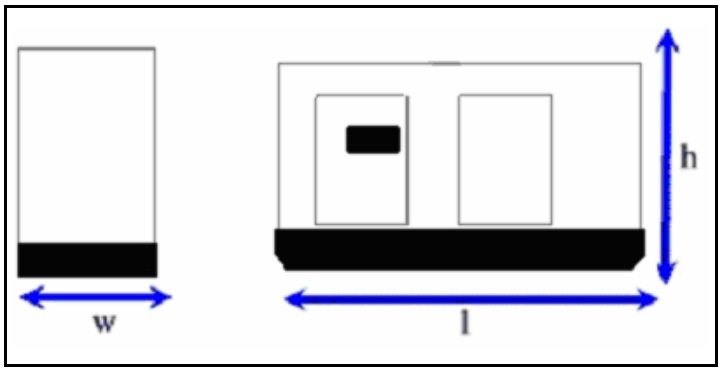
- Double walll day tank and great autonomy

Literature

- Parts
- Maintenance

Weight and Dimensions

Dimensions with great autonomy fuel tank



Overall size l x w x h :
3560mm [140.2in] x 1200mm [47.2in] x 2182mm [85.8in]

Weight:
2763kg [6091lbs] Dry 3646kg [8038lbs] Wet

Canopy:
M226

Noise level:
69 dB @ 7 m
97.4 Lwa