R165C2

Engine JOHN DEERE , 6068HFS73 Stage 2
Alternator LEROY SOMER , LSA442M95

STANDARD FEATURES

- Analog engine
- Connection terminal block "rental type"
- Four-pole breaker
- Central lifting ring
- Intlet air pre-heating
- Rental specific soundproofed canopy
- Diesel low level
- AREP Leroy-Somer Alternator
- Easy radiator access
- Rain cap

Voltage	Power ESP kWe/kVA	Power PRP kWe/kVA	Standby Amps
400/230	132 / 165	120 / 150	238

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. A 10% overload capability is available for a period of 1 hour within 12-hour 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.

TERM OF USE

Standard reference conditions **25 °C** Air Intlet Temp, **1000** m A.S.L. 60 % relative humidity. All engine performance data based on the above mentioned maximum continuous ratings.

	Type	dB(A)@1m	dB(A)@7m	Dimensions	Weight	Tank
	M226-DW	76.8	66.8	Long: 3560mm [140in] Wide: 1200mm [47in] Height: 2182mm [86in]	2673kg [lbs] Net 3556kg [lbs] Gross	868 L
	M226	76.8	66.8	Long: 3508mm [138in] Wide: 1200mm [47in] Height: 1830mm [72in]	2230kg [lbs] Net 2580kg [lbs] Gross	340 L

Base Rental Power + options suivantes = Full Rental Power	
Double wall and great autonomy tank	Air intlet manifold preheating
Water separator pre-filter	Voltage trimmer
Fixed earth leakage protection with spike	Battery cut-out
Lub oil drain pump	

ENGINE SPECIFICATIONS

STANDARD FEATURES	Manufacturer / Model	JOHN DEERE 6068HFS73 , 4-strokes, Turbo , Air/Water SC 6 X
	Cylinder Arrangement	L
	Displacement	9L [549.2C.I.]
	Bore and Stroke	136mm [5.4in.] X 118.4mm [4.7in.]
	Compression ratio	16 : 1
	Rated RPM	1500 Rpm
	Piston Speed	6.35m/s [20.8ft./s]
	Max. stand by Power at rated RPM	153kW [205BHP]
	Frequency regulation, steady state	+/- 0.5%
	BMEP	N/A
	Governor : type	ELEC
EXHAUST SYSTEM	Exhaust gas flow	N/A
	Exhaust temperature	N/A
	Max back pressure	750mm CE [30in. WG]
FUEL SYSTEM	110% (Stand By power)	36.72L/h [9.7gal/hr]
	100% (of the Prime Power)	33.36L/h [8.8gal/hr]
	75% (of the Prime Power)	25.39L/h [6.7gal/hr]
	50% (of the Prime Power)	17.66L/h [4.7gal/hr]
	Max. fuel pump flow	N/A
OIL SYSTEM	Total oil capacity w/filters	35L [9.2gal]
	Oil Pressure low idle	1.38bar [20.0psi]
	Oil Pressure rated RPM	2.75bar [39.8psi]
	Oil consumption 100% load	0.08L/h [0.0gal/hr]
	Oil capacity carter	34L [9.0gal]
THERMAL BALANCE	Heat rejection to exhaust	115.68kW [6578Btu/mn]
	Radiated heat to ambiant	18.66kW [1061Btu/mn]
	Heat rejection to coolant	N/A
AIR INTAKE	Max. intake restriction	300mm CE [12in. WG]
	Engine air flow	175.00L/s [371cfm]
COOLANT SYSTEM	Radiator & engine capacity	16L [4.227gal]
	Max water temperature	N/A
	Outlet water temperature	N/A
	Fan power	8.42 kW
	Fan air flow w/o restriction	N/A
	Available restriction on air flow	20mm CE [0.8in. WG]
	Type of coolant	Gencool
	Thermostat	82-94 °C
GAS SYSTEM	HC	0.06 g/KW.h
	CO	0.72 g/KW.h
	Nox	5.47 g/KW.h
	PM	0.14 g/KW.h

ALTERNATOR SPECIFICATIONS

GENERAL DATAS	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	2 AC
	Total harmonics (TGH/THC)	< 2%
	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	+/- 0.5%
	Recovery time (20% Volt dip) ms	500 ms
	SkVA with 90% of nominal sustained voltage (at 0.4PF)	skva
OTHER DATAS	Continuous nominal rating @ 40°C	150 kVA
	Standby rating @ 27°C	165 kVA
	Efficiencies @ 4/4 load	92.2 %
	Air flow	0.37m3/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
	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 reactance unsaturated (Xo)	0.1 %
	Negative sequence reactance saturated (X2)	7.3 %
	Armature time constant (Ta)	15 ms
	No load excitation current (io)	0.6 A
	Full load excitation current (ic)	ic
	Full load excitation voltage (uc)	36 V
	Recovery time (Delta U = 20% transitoire)	500 ms
	Motor start (Delta = 20% perm. Or 50% trans.)	329.2 kVA
	Transient dip (4/4 charge) – PF : 1.8 AR	12.2 %
	No load losses	2.62kW [2.62Kw]
	Heat rejection	10.15 kW

CONTROL PANEL

Standard

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

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