





J100UC3

Engine JOHN DEERE, 4045HFS83, U.S. EPA Tier 3
Alternator LEROY SOMER, LSA442VS45

100KW GENERATOR

100 KW / 125 KVA DIESEL GENERATOR SET, FULLY PACKAGED:

- JOHN DEERE Heavy duty diesel engine, 4 stroke, 1800rpm, Turbo, EPA
- LEROY SOMER brushless alternator. IP23 protection, Insulation class H
- MERLIN GERIN, Main line circuit breaker, wired, maximum output rated
- EPA Tier 3 compliant engine per U.S. Environmental Protection Agency
- Digital auto-start control panel. CE and UL compliant
- Incorporated metallic fuel tank for day use
- Auto Start control feature included for interoperation with ATS/AMF
- 12V charging alternator and 12V DC electric starter motor
- 12V charged DC starting battery with electrolyte and cables
- Dry type air filter, fuel filter and oil filter elements installed
- Mechanically welded chassis with vibration isolators
- Each unit prototype and individually factory load bank tested
- The generator accepts 100% rated load in one step as per NFPA110 and meets ISO8528-5 class G-3 for transient response
- Compliant with ISO3046, ISO8528, BS4999, BS5514, BS5000PT99, AS1359, IEC34, UTE5100, VDE0530 and ISO9001:2000



- Steel or Aluminum weather proof, sound attenuated enclosures
- UL142 listed, double wall fuel tanks from 50 to 10,000 Gal
- UL1008 listed, automatic transfer switches from 50 to 3000 Amp
- D.O.T. compliant heavy duty road trailers from 3000 to 30000 Lbs
- Automatic battery chargers, Engine preheaters, Remote annunciators and many more



Voltage	Power ESP kWe/kVA	Power PRP kWe/kVA	Standby Amps	Dimensions – open	Weight – open
480/277	100 / 125	91 / 114	150		
440/254	100 / 125	91 / 114	164	Leng: 1950mm [77in]	1240kg [2734lbs] Net
240/120	100 / 125	91 / 114	301	Widt: 1084mm [43in]	1440kg [3175lbs] Gross
230/115	100 / 125	91 / 114	314	Heig : 1350mm [53in]	
220/127	100 / 125	91 / 114	328		
208/120	100 / 125	91 / 114	347		
600/347	100 / 125	91 / 114	120		

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.

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 ESP/PRP 25 C°/25 C° Air Intlet Temp, 1000 m/1000 m m A.S.L. 60 % relative humidity.

WEATHER / SOUND PROOF ENCLOSURES

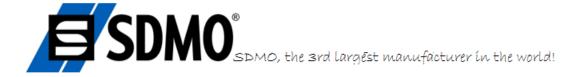
	Model	dB(A)@1m	dB(A)@7m	Dimensions – enclosed	Weight - enclosed	Tank
- 8	M129-DW	78	68	Leng : 2602mm [102in] Widt : 1150mm [45in] Heig : 1900mm [75in]	2049kg [4517lbs] 2560kg [5644lbs]	505 L 133 Gal
- 6	M129	78	68	Leng : 2554mm [101in] Widt : 1150mm [45in] Heig : 1680mm [66in]	1650kg [3638lbs] 1850kg [4079lbs]	190 L 50 Gal

100KW GENERATOR

GENERAL POWER LIMITED, INC

Phone (305) 471 9566, Phone (888) POWER 58, Fax (305) 471 9568, Fax (305) 675 8033 www.dieselgeneratorsmiami.com www.genpowerusa.com info@genpowerusa.com MIAMI, FLORIDA | TUSTIN, CALIFORNIA | PANAMA | FRANCE | COLOMBIA | U.K.







ENGINE SPECIFICATIONS

	Engine model	JOHN DEERE 4045HFS83 , 4-temps, TURBO ,		
	Culinday owner seasont	AIR/AIR 4 X L		
	Cylinder arrangement	4.48		
	Displacement (C.I.)	4.46 106 X 127		
	Bore (mm) X Stroke (mm) Compression ratio	19:1		
DATA	Speed (RPM)	1800		
DATA	Pistons speed (m/s)	7.62		
GENERAL DATA	Maximum stand-by power at rated RPM (kW)	118		
GENERAL DATA	Frequency regulation (%)	0.5		
	BMEP (bar)	15.9		
	Governor type	15.9 ELECTRONIC		
EVILALIOT OVOTEN	Exhaust gas temperature (°C)	580 380		
EXHAUST SYSTEM	Exhaust gas flow (L/s)			
	Max. exhaust back pressure (mm CE)	750		
	Fuel consumption 110% load (gal/hr)	8.2		
	Fuel consumption 100% load (gal/hr)	7.5		
FUEL SYSTEM	Fuel consumption 75% (gal/hr)	6.5		
	Fuel consumption 50% (gal/hr)	4.7		
	Maximum fuel pump flow (gal/hr)	19.7		
	Oil capacity (L)	13		
	Min. oil pressure (bar)	1.05		
OIL	Max. oil pressure (bar)	3		
	Oil consumption 100% load (L/h)	0.08		
	Carter oil capacity (L)	12		
THERMAL BALANCE	Heat rejection to exhaust (kW)	111.15		
	Radiated heat to ambiant (kW)	14.39		
	Haet rejection to coolant (kW)	62.3+19.8		
AIR INTAKE	AIR INTAKE_entree_max%	375		
	Intake air flow (L/s)	136		
	Radiator & Engine capacity (L)	20.2		
	Max water temperature (°C)	110		
	Outlet water temperature (°C)	93		
COOLANT SYSTEM	Fan power (kW)	6.49		
	Fan air flow w/o restriction (m3/s)	4		
	Available restriction on air flow (mm CE)	20		
	Type of coolant	GENCOOL		
	Thermostat (°C)	82-95		
	Emissions PM (g/kWh)	0.25		
EMISSIONS	Emission CO (g/kW.h)	1.47		
	Emissions HCNOx (g/kWh)	3.43		
	Emission HC (g/kW.h)	0.14		











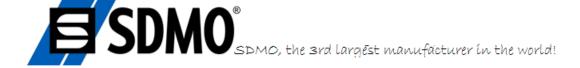
ALTERNATOR SPECIFICATIONS

	Alternator brand	LEROY SOMER	
	Alternator	LSA442VS45	
	Number of phase	3	
	Power factor (Cos Phi)	0.8	
	Altitude (m)	<1000	
	Overspeed (rpm)	2250	
	Number of pole	4	
DATA	Excitation system	SHUNT	
	Insulation class / Temperature class	H/H	
GENERAL DATA	Regulation	R230	
	Total harmonics TGH/THC	<2	
	Wave form : NEMA=TIF-TGH/THC	<50	
	Wave form : CEI=FHT-TGH/THC	<2	
	Number of bearing	1	
	Coupling	DIRECT	
	Voltage regulation 0 to 100%	0.5%	
	Recovery time (Delta U = 20% transitoire) (ms)	500	
	Continuous Nominal Rating 40°C (kVA)	131	
	Standby Rating 27°C (kVA)	144	
	Efficiencies 4/4 load (%)	91	
	Air flow (cfm)	0.44	
	Short circuit ratio (Kcc)	0.33	
	Direct axis synchro reactance unsaturated (Xd) (%)	377	
	Quadra axis synchro reactance unsaturated (Xq) (%)	226	
	Open circuit time constant (T'do) (ms)	2555	
	Direct axis transient reactance saturated (X'd) (%)	15	
	Short circuit transient time constant (T'd) (ms)	100	
OTHER	Direct axis subtransient reactance saturated (X"d) (%)	9	
	Subtransient time constant (T"d) (ms)	10	
DATA	Quadra axis subtransient reactance saturated (X"q) (%)	10.8	
	Zero sequence reactance unsaturated (Xo) (%)	0.9	
	Negative sequence reactance saturated (X2) (%)	9.9	
	Armature time constant (Ta) (ms)	15	
	No load excitation current (io) (ms)	0.5	
	Full load excitation current (ic) (A)	2.1	
	Full load excitation voltage (uc) (A)	38	
	Recovery time (Delta U = 20% transitoire) (ms)	500	
	Motor start (Delta U = 20% perm. or 50% trans.) (ms)	238	
	Transient dip (4/4 charge) - PF: 0,8 AR (%)	17.8	
	No load losses (kW)	2.72	
	Heat rejection (kW)	10.25	











CONTROL PANELS

Standard

NEXYS

NEXYS

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, Alr preheating

Option



TELYS 2

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, Remote monitoring and control

ACCESSORIES AND OPTIONS

Option

50 to 3000 AMP Automatic Transfer Switches, UL1008 listed



With a Series 300 transfer switch, you get a product backed by ASCO Power Technologies, the industry leader

- •True double-throw operation: single solenoid design is inherently interlocked & prevents contacts from stopping between sources
- Easy-to-read flush-mounted control and display panel provides LED indicators for switch position and source availability
- Standard engine exerciser for weekly automatic testing with or without load
- •UL 1008 listed for Transfer Equipment and CSA C22.2 listed
- ●NFPA 110 for Emergency & Standby Power & the National Electrical (NEC) Articles 700, 701 and 702

Option



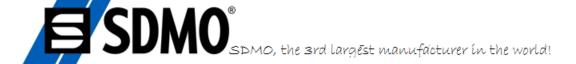
50 to 10000 GAL fuel tanks, UL142 listed

- •UL listed. Secondary containment tank meeting UL 142 tank requirements
- ●NFPA compliant. Designed to comply with the installation standards of NFPA 30 and NFPA 37
- Emergency pressure relief vents. Meets UL requirements; ensures adequate venting of inner and outer tank under extreme pressure and/or emergency conditions
- •Electrical stub-up area with removable end channel
- •Normal vent Inner tank emergency vent sized to UL 142 specs
- •Direct reading mechanical fuel gauge Fuel in basin switch
- Satin black paint finish













M129

Weather / Soundproof Enclosure

STANDARD FEATURES

- They protect stationary and mobile generator against the bad weather, against the theft and enables the reduction of the noise level.
- Enclosures are of 12 gauge steel. Steel sheet are electro zinc coated before painting (inside and outside) with a polyester powder rust inhibiting coat.
- High corrosion resistance: stainless covered with zinc and made in dichromate, bolts and rivets, anodized aluminium alloy hinges flexible seals between body sections.
- Soundfoam between 20 and 50 mm (1 to 2 in) acoustical sound treatment
- Lifting eye(s) on top of the enclosure fixed to the skid
- Large doors allow easy access to the generator set for service and monitoring purposes
- Window in "securit" glass mounted on enclosure door for control viewing .
- A critical silencer is mounted inside the enclosure
- Emergency stop button is accessible from outside enclosure.



Model	Sound level			Dimensions	Weight	Tank
	dB(A)@1m dB(A)@7m LWA			(mm)	(kgs)	(I)
J100UC3	78	68	N/A	2554 x 1150 x 1680	1650	190

