

J100UC3

Engine JOHN DEERE , 4045HF285
 Alternator LEROY SOMER , LSA442VS45

STANDARD FEATURES

- Radiator 50°C [122°F]°C max T° air inlet with coolant cap
- Mechanically welded chassis with antivibration suspension
- Control panel compliant with European standard
- Power circuit breaker
- Oil drain tap + diesel pipe
- Tank integrated into the chassis
- Batteries with cables and batterie mounting

Voltages	Power ESP kWe/kVA	Power PRP kWe/kVA	Standby Amps	Dimensions (mm)	
				LxWxH	Weight
480/277	100 / 125	91 / 114	150	1950mm x 1084mm x 1330mm	1160 kg Net 1190 kg Gross
440/254	100 / 125	91 / 114	164		
240/120	100 / 125	91 / 114	301		
230/115	100 / 125	91 / 114	314		
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. 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 N/A °C Air Intlet Temp, N/A m A.S.L. 60 % relative humidity. All engine performance data based on the above mentioned maximum continuous ratings.

	Type	Noise level		Dimensions (m) LxWxH	Weight	Tank (l)
		dB(A)@1m	dB(A)@7m			
	Soundproofed Version					
	M129	78	68	2554mmx1170mmx1680mm	1560 kg Net 1590 kg Gross	N/A





ENGINE SPECIFICATIONS

STANDARD FEATURES	Manufacturer / Model	JOHN DEERE 4045HF285 , 4-cycle, Turbo , Air/Water SC 4 X
	Cylinder Arrangement	L
	Displacement	6.8L [415.0C.I.]
	Bore and Stroke	106mm [4.2in.] X 127mm [5.0in.]
	Compression ratio	17,0 : 1
	Rated RPM	1800 Rpm
	Piston Speed	7.62m/s [25.0ft./s]
	Max. stand by Power at rated RPM	147kW [197BHP]
	Frequency regulation, steady state	+/-0.5%
	BMEP	21.78bar [316psi]
Governor : type	Elec	
EXHAUST SYSTEM	Exhaust gas flow	485°C [905°F]
	Exhaust temperature	466.67L/s [989cfm]
	Max back pressure	1000mm CE [39in. WG]
FUEL SYSTEM	110% (Stand By power)	37.06L/h [9.8gal/hr]
	100% (of the Prime Power)	N/A
	75% (of the Prime Power)	N/A
	50% (of the Prime Power)	N/A
	Total fuel flow	92.59L/h [24.5gal/hr]
OIL SYSTEM	Total oil capacity w/filters	33L [8.7gal]
	Oil Pressure low idle	1.38bar [20.0psi]
	Oil Pressure rated RPM	2.75bar [39.8psi]
	Oil consumption 100% load	0.09L/h [0.0gal/hr]
	Oil capacity carter	32L [8.5gal]
THERMAL BALANCE	Heat rejection to exhaust	111.15kW [6320Btu/mn]
	Radiated heat to ambient	17.93kW [1019Btu/mn]
	Heat rejection to coolant	N/A
AIR INTAKE	Max. intake restriction	375mm CE [15in. WG]
	Engine air flow	466.67L/s [989cfm]
COOLANT SYSTEM	Radiator & engine capacity	11.9L [3.1 gal]
	Max water temperature	110°C [230°F]
	Outlet water temperature	N/A
	Fan power	8.09 kW
	Fan air flow	N/A
	Available restriction on air flow	N/A
	Type of coolant	Gencool
	Thermostat	82-94 °C
GAS SYSTEM	HC	N/A
	CO	N/A
	Nox	N/A
	PM	N/A





ALTERNATOR SPECIFICATIONS

GENERAL DATAS	<p style="text-align: right;">Manufacturer / Type Number of phase Power factor (Cos Phi) Altitude Overspeed Pole : number Exciter type Insulation : class, temperature rise Voltage regulator Sustained short circuit current Total harmonics (TGH/THC) Wave form : NEMA = TIF – TGH/THC Wave form : CEI = FHT – TGH/THC Bearing : number Coupling Voltage regulation 0 to 100% load Recovery time (20% Volt dip) ms SkVA with 90 % of nominal sustained voltage (at 0.4 PF)</p>	<p>LEROY SOMER LSA442VS45 3 0.8 < 1000 m 2250 rpm 4 Shunt H / H R230 2.1 AC < 4% < 50 < 2% 1 Direct +/- 1% 500 ms N/A</p>
OTHER DATAS	<p style="text-align: right;">Continuous nominal rating @ 40°C Standby rating @ 27°C Efficiencies @ 4/4 load Air flow Short circuit ratio;50 (Kcc) Direct axis synchro reactance unsaturated (Xd) Quadra axis synchro reactance unsaturated (Xq) Open circuit time constant;50 (T'do) Direct axis transient reactance saturated (X'd) Short circuit transient time constant (T'd) Direct axis subtransient reactance saturated (X''d) Subtransient time constant (T''d) Quadra axis subtransient reactance saturated (X''q) Zero sequence reactance unsaturated (Xo) Negative sequence reactance saturated (X2) Armature time constant (Ta) No load excitation current (io) Full load excitation current (ic) Full load excitation voltage (uc) Recovery time (Delta U = 20% transitoire) Motor start (Delta = 20% perm. Or 50% trans.) Transient dip (4/4 charge) – PF : 1.8 AR No load losses Heat rejection</p>	<p>123 kVA 144 kVA 91 % 0.44m3/s [932.30cfm] 0.33 377 % 226 % 2555 ms 14.7 % 100 ms 8.8 % 10 ms 10.8 % 1 % 9.9 % 15 ms 0.5 A N/A 39 V 500 ms 330 kVA 17.6 % 2.72 kW 10 kW</p>



CONTROL PANEL

NEXYS

Standard Panel

**Specifications:**

Frequency meter, Ammeter, Voltmeter

Alarms and faults:

Oil pressure, water temperature, No start-up, Overspeed, Min/max alternator, Min/max battery voltage, Emergency stop

Engine parameters:

Hours counter, Oil pressure, Water temperature, Engine speed, Battery voltage, Fuel level

TELYS

Option Panel

**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

