



R75UC2

Engine JOHN DEERE , 4045TF270 Tiers 2
Alternator LEROY SOMER , LSA432L65

STANDARD FEATURES

- Analog engine
- Connection terminal block "rental type"
- Central lifting ring
- Water separator pre-filter
- Voltage adjustment
- Drainage pump
- Battery isolating switch
- Containment and great autonomy tank
- Replaceable cartridge heavy duty air filter
- Sockets

Voltage	Power ESP kWe/kVA	Power PRP kWe/kVA	Standby Amps
480/277	65 / 81	59 / 74	97
208/120	62 / 77	56 / 70	214
240MONO	34 / 43	31 / 39	103


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, 3800 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
 M128-DW	76	66	Long: 2344mm [92in] Wide: 1060mm [42in] Height: 1900mm [75in]	1700kg [3747lbs] Net 2092kg [4611lbs] Gross	390 L



ENGINE SPECIFICATIONS

STANDARD FEATURES	Manufacturer / Model	JOHN DEERE 4045TF270 , 4-strokes, Turbo , N/A 4 X
	Cylinder Arrangement	L
	Displacement	4.48L [273.4C.I.]
	Bore and Stroke	127mm [5.0in.] X 106mm [4.2in.]
	Compression ratio	17 : 1
	Rated RPM	1800 Rpm
	Piston Speed	7.62m/s [25.0ft./s]
	Max. stand by Power at rated RPM	79kW [106BHP]
	Frequency regulation, steady state	+/-2. 5%
	BMEP	11bar [159psi]
Governor : type	Meca	
EXHAUST SYSTEM	Exhaust gas flow	520°C [968°F]
	Exhaust temperature	220L/s [466cfm]
	Max back pressure	750mm CE [30in. WG]
FUEL SYSTEM	110% (Stand By power)	20.5L/h [5.4gal/hr]
	100% (of the Prime Power)	19L/h [5.0gal/hr]
	75% (of the Prime Power)	14.5L/h [3.8gal/hr]
	50% (of the Prime Power)	10.5L/h [2.8gal/hr]
	Max. fuel pump flow	112L/h [29.6gal/hr]
OIL SYSTEM	Total oil capacity w/filters	13.5L [3.6gal]
	Oil Pressure low idle	1bar [14.5psi]
	Oil Pressure rated RPM	5bar [72.5psi]
	Oil consumption 100% load	0.02L/h [0.0gal/hr]
	Oil capacity carter	12.5L [3.3gal]
THERMAL BALANCE	Heat rejection to exhaust	63kW [3582Btu/mn]
	Radiated heat to ambient	9kW [512Btu/mn]
	Heat rejection to coolant	39kW [2218Btu/mn]
AIR INTAKE	Max. intake restriction	625mm CE [25in. WG]
	Engine air flow	88L/s [186cfm]
COOLANT SYSTEM	Radiator & engine capacity	23.6L [6.2gal]
	Max water temperature	105°C [221°F]
	Outlet water temperature	93°C [199°F]
	Fan power	3 kW
	Fan air flow w/o restriction	3.1m ³ /s [6569cfm]
	Available restriction on air flow	20mm CE [0.8in. WG]
	Type of coolant	Gencool
Thermostat	82-94 °C	
GAS SYSTEM	CO	1.42 gr/bhp/h
	HC/Nox	5.00 gr/bhp/h
	PM	0.19 gr/bhp/h



ALTERNATOR SPECIFICATIONS

GENERAL DATAS	Manufacturer / Type	LEROY SOMER LSA432L65
	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	1.6 AC
	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 0.4PF)	N/A	
OTHER DATAS	Continuous nominal rating @ 40°C	88 kVA
	Standby rating @ 27°C	91 kVA
	Efficiencies @ 4/4 load	91.1 %
	Air flow	0.32m ³ /s [678.04cfm]
	Short circuit ratio;50 (Kcc)	0.4
	Direct axis synchro reactance unsaturated (Xd)	293 %
	Quadra axis synchro reactance unsaturated (Xq)	176 %
	Open circuit time constant;50 (T'do)	1431 ms
	Direct axis transient reactance saturated (X'd)	10.2 %
	Short circuit transient time constant (T'd)	50 ms
	Direct axis subtransient reactance saturated (X''d)	5.1 %
	Subtransient time constant (T''d)	5 ms
	Quadra axis subtransient reactance saturated (X''q)	6.3 %
	Zero sequence reactance unsaturated (Xo)	0.1 %
	Negative sequence reactance saturated (X2)	5.8 %
	Armature time constant (Ta)	8 ms
	No load excitation current (io)	0.4 A
	Full load excitation current (ic)	N/A
	Full load excitation voltage (uc)	29 V
	Recovery time (Delta U = 20% transitoire)	500 ms
	Motor start (Delta = 20% perm. Or 50% trans.)	310 kVA
	Transient dip (4/4 charge) – PF : 1.8 AR	14 %
	No load losses	2.06 kW
Heat rejection	7.57 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