

J300K

Motor type 6081HF001
Alternator type LSA462L9

GENERAL CHARACTERISTICS

- Mechanic governor
- Mechanically welded chassis with antivibration suspension
- Main line circuit breaker
- Radiator for wiring temperature of 48/50°C max with
- Protective grille for fan and rotating parts
- 9 dB(A) silencer supplied separately
- Charger DC starting battery with electrolyte
- 12 V charge alternator and starter
- Delivered with oil and coolant -30°C
- Manual for use and installation



J300K : JOHN DEERE, 6081HF001 - LEROY SOMER, LSA462L9

Voltage (V)	Voltage Code	Power ESP		Power PRP		Standby Amps
		kWe	kVA	kWe	kVA	
415/240	T51A1	242	303	220	275	422
400/230	T51A2	242	303	220	275	437
380/220	T51A3	242	303	220	275	460
240/120	T51C1	242	303	220	275	729
230/115	T51C2	242	303	220	275	761
220/110	T51C3	242	303	220	275	795
200/115	T51B2	242	303	220	275	875

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.

TERMS OF USE

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

ENGINE SPECIFICATIONS

	Description	6081HF001
GENERAL CHARACTERISTICS	Motor model	JOHN DEERE
	Cylinder arrangement	L
	Number of cylinders	6
	Bore (mm)	116
	Stroke (mm)	129
	Displacement (C.I.)	8.18
	Compression ratio	15.7 : 1
	Speed (RPM)	1500
	Pistons speed (m/s)	6.45
	Maximum stand-by power at rated RPM (kW)	261
	Governor type	Mechanical
	Frequency regulation (%)	+/- 2.5%
	BMEP (bar)	23.18
EXHAUST	Exhaust gas flow (L/s)	740
	Exhaust gas temperature (°C)	640
	Max. exhaust back pressure (mm CE)	750
FUEL	Consumption @ 110% load (L/h)	68
	Consumption @ 100% load (L/h)	56.9
	Consumption @ 75% load (L/h)	42.6
	Consumption @ 50% load (L/h)	29.4
	Maximum fuel pump flow (L/hr)	203
OIL SYSTEM	Oil capacity (L)	32
	Min. oil pressure (bar)	2.1
	Max. oil pressure (bar)	2.75
	Oil consumption 100% load (L/h)	0.08
	Carter oil capacity (L)	31
HEAT BALANCE	Heat rejection to exhaust (kW)	213
	Radiated heat to ambient (kW)	34
	Heat rejection to coolant (kW)	103+55
AIR INTAKE	Intake air flow (L/s)	303
	Max. intake restriction (mm CE)	625
COOLING SYSTEM	Radiator & Engine capacity (L)	40
	Max water temperature (°C)	105
	Outlet water temperature (°C)	93
	Fan power (kW)	7
	Fan air flow w/o restriction (m3/s)	5.5
	Available restriction on air flow (mm CE)	20
	Type of coolant	Gencool
Thermostat (°C)	82-94	
EMISSIONS	Emission HC (mg/Nm3)	59
	Emission Nox (mg/Nm3)	2050
	Emission CO (mg/Nm3)	300
	Emissions PM (mg/Nm3)	60

ALTERNATOR SPECIFICATIONS

GENERAL CHARACTERISTICS	Description	LSA 46.2 L9
	Alternator brand	LEROY SOMER
	Number of phase	3
	Altitude (m)	0 à 1000
	Overspeed (rpm)	2250
	Number of pole	4
	Excitation system	SHUNT
	Insulation class	H
	Regulation	R230
	#Taux d'harmonique à vide TGH/THC	< 2.5%
	#Taux d'harmonique en charge TGH/THC	< 2.5%
	Wave form : CEI=FHT-(TGH/THC)	< 2%
	Wave form : NEMA=TIF-(TGH/THC)	< 50
	Number of bearing	1
	Coupling	Direct
	#Régulation de tension à régime établi (%)	+/- 0.5%
	POWERS	Air flow (m3/s)
Power factor (Cos Phi)		0.8
Continuous Nominal Rating 40°C (kVA)		280
Standby Nominal Rating 40°C (kVA)		290
Standby Rating 27°C (kVA)		300
REACTANCES (R) - TIME CONSTANT(CT)	Efficiencis 4/4 load (%)	93
	Short circuit ratio (Kcc)	0.48
	Direct axis synchro reactance unsaturated (Xd) (%)	294
	Quadra axis synchro reactance unsaturated (Xq) (%)	176
	Open circuit time constant (T'do) (ms)	2175
	Direct axis transient reactance saturated (X'd) (%)	13.5
	Short circuit transient time constant (T'd) (ms)	100
	Direct axis subtransient reactance saturated (X''d) (%)	8.1
	Subtransient time constant (T''d) (ms)	10
	Quadra axis subtransient reactance saturated (X''q)	10
	Zero sequence reactance unsaturated (Xo) (%)	0.7
OTHER CHARACTERISTICS	Negative sequence reactance saturated (X2) (%)	9.1
	Armature time constant (Ta) (ms)	15
	No load excitation current (io) (A)	1.1
	Full load excitation current (ic) (A)	3.9
	Full load excitation voltage (uc) (V)	33
	Recovery time (Delta U = 20% transitoire) (ms)	500
	Motor start (Delta U = 20% perm. or 50% trans.)	538
	Transient dip (4/4 charge) - PF : 0,8 AR (%)	14.6
No load losses (W)	4340	
Heat rejection (W)	16810	

DIMENSIONS AND NOISE LEVELS

DIMENSIONS COMPACT VERSION	Length (mm)	2900
	Width (mm)	1300
	Height (mm)	1697
	Tank capacity (L)	390
	Dry weight (kg)	2235
DIMENSIONS CANOPIED VERSION	Canopy	M227
	Length (mm).	4004
	Width (mm).	1380
	Height (mm).	2145
	Tank capacity (L).	390
	Dry weight (kg).	3215
NOISE LEVEL	dB(A) @ 1m (50Hz)	79.5
	dB(A) @ 7m (50Hz)	69.5
	dB(A) @ 15m (50Hz)	65.5
	LWa (50Hz)	95

CONTAINMENT

DIMENSIONS COMPACT VERSION	Length (mm)	4056
	Width (mm)	1360
	Height (mm)	1912
	Tank capacity (L)	950
	Dry weight (kg)	2911
DIMENSIONS CANOPIED VERSION	Canopy	M227 DW
	Length (mm).	4056
	Width (mm).	1380
	Height (mm).	2340
	Tank capacity (L).	950
	Dry weight (kg).	3692
NOISE LEVEL	dB(A) @ 1m (50Hz)	79.5
	dB(A) @ 7m (50Hz)	69.5
	dB(A) @ 15m (50Hz)	65.5
	LWa (50Hz)	95

CONTROL PANELS

DESCRIPTION OF STANDARD CONTROL PANEL



The NEXYS is a versatile control unit allowing operation in manual or automatic mode. Equipped with an LCD screen, the user-friendly NEXYS offers high-quality basic functions to guarantee simple, reliable operation of your generating set.

Offers the following functions:

Standard electrical measurements: voltmeter, frequency meter, ammeter.

Engine parameters: working hours counter, engine speed, battery voltage, fuel level.

DESCRIPTION OF CONTROL PANEL AS OPTION



The highly versatile TELYS control unit is complex yet accessible, thanks to the particular attention paid to optimising its ergonomics and ease of use. With its large display screen, buttons and scroll wheel, it places the accent on simplicity and communication.

The TELYS offers the following functions:

Electrical measurements: voltmeter, frequency meter, ammeter.

Engine parameters: working hours counter, oil pressure,