



Standard equipment

- Connection terminal box rental type
- Four-pole circuit breaker
- Central lifting ring
- Fuel low level alarm
- AREP Leroy-Somer alternator TS26004
- Access door to the radiator
- Primary fuel filter
- Oil drainage pump
- Forks lift pocket
- Battery isolating switch
- Inlet air preheating
- Heavy duty air filter with interchangeable cartridge
- Adjustable earth fault protection and earthing rod
- Mecanical hours meter
- Retention bund
- Heat hand protections (CE standard)

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.

Terms of use

Standard reference conditions ESP/PRP 40°/40° , Air Inlet Temp, 1000m/1000m mA.S.L 60% relative humidity

R110C3

Engine	4045HFS87
Alternator	LSA 44.2 VS45
Canopy Type	M3129

Standard features

Frequency (Hz)	50
Voltage value	400
Max power ESP (kVA)	110
Max power ESP (kWe)	88
Max power PRP (kVA)	100
Max power PRP (kWe)	80
Intensity (A)	159
Standard Control Panel	NEXYS
Optional control panel	TELYS

Large fuel tank Dimension

Length (mm)	2860
Width (mm)	1150
Height (mm)	1995
Dry weight (kg)	N/A
Tank capacity (L)	516
Autonomy @ 75% of load (h)	23.7
Autonomy @ 50% of load (h)	36

Small fuel tank Dimension

Length (mm)	N/A
Width (mm)	N/A
Height (mm)	N/A
Dry weight (kg)	N/A
Tank capacity (L)	N/A
Autonomy @ 75% of load (h)	N/A
Autonomy @ 50% of load (h)	N/A

Sound level

Acoustic pressure level @1m in dB(A)	74.9
Acoustic pressure level @7m in dB(A)	64.9
Acoustic pressure level @15m in dB(A)	60.9
Sound power level guaranteed (Lwa)	N/A

General Data

Engine	JOHN DEERE 4045HFS87
Cylinder arrangement	L
Number of cylinders	4
Displacement (C.I.)	4.48
Bore (mm) x Stroke (mm)	106 x 127
Compression ratio	19 : 1
Speed (RPM)	1500
Pistons speed (m/s)	6.35
Maximum stand-by power at rated RPM (kW)	103
Frequency regulation (%)	0.5
BMEP (bar)	16.67
Governor type	ELEC

Coolant system

Radiator & Engine capacity (L)	N/A
Max water temperature (°C)	110
Outlet water temperature (°C)	N/A
Fan power (kW)	3.8
Fan air flow w/o restriction (m3/s)	N/A
Available restriction on air flow (mm EC)	N/A
Type of coolant	GENCOOL
Thermostat (°C)	82-95

Emissions

Emission PM (g/kW.h)	0.2
Emission CO (g/kW.h)	3.5
Emission HCNOx (g/kWh)	4
Emission HC (g/kW.h)	N/A

Exhaust system

Exhaust gas flow (L/s)	318
Exhaust gas temperature (°C)	502
Max. exhaust back pressure (mm EC)	750

Fuel system

Consumption @ 110% load (L/h)	24.35
Consumption @ 100% load (L/h)	24.2
Consumption @ 75% load (L/h)	20.7
Consumption @ 50% load (L/h)	14.2
Maximum fuel pump flow (L/h)	N/A

Oil

Oil capacity (L)	13
Min. oil pressure (bar)	1.05
Max. oil pressure (bar)	4
Oil consumption 100% load (L/h)	0.06
Carter oil capacity (L)	12

Energy Balance Sheet

Heat rejection to exhaust (kW)	N/A
Radiated heat to ambient (kW)	10
Heat rejection to coolant (kW)	47

Air intake

Max. intake restriction (mm EC)	750
Intake air flow (L/s)	127

General Data		Other datas	
Alternator	LEROY SOMER LSA 44.2 VS45	Continuous Nominal Rating 40°C (kVA)	105
Number of phase	3	Standby Rating 27°C (kVA)	116
Power factor (Cos Phi)	0.8	Efficiencies 4/4 load (%)	90.8
Altitude (m)	0-1000	Air flow (m3/s)	0.37
Overspeed (rpm)	2250	Short circuit ratio (Kcc)	0.35
Number of pole	4	Direct axis synchro reactance unsaturated (Xd) (%)	362
Excitation system	AREP	Quadra axis synchro reactance unsaturated (Xq) (%)	217
Insulation class	H	Open circuit time constant (T'do) (ms)	2555
Regulation	R450	Direct axis transient reactance saturated (X'd) (%)	14.1
Harmonic factor, no load TGH/THC	<2	Short circuit transient time constant (T'd) (ms)	100
Wave form : NEMA=TIF-(TGH/THC)	INF50	Direct axis subtransient reactance saturated (X''d) (%)	8.5
Wave form : CEI=FHT-(TGH/THC)	INF2	Subtransient time constant (T''d) (ms)	10
Number of bearing	1	Quadra axis subtransient reactance saturated (X''q) (%)	10.4
Coupling	DIRECT	Zero sequence reactance unsaturated (Xo) (%)	0.5
Voltage regulation at established rating (%)	0.5	Negative sequence reactance saturated (X2) (%)	9.5
Recovery time (Delta U = 20% transient) (ms)	500	Armature time constant (Ta) (ms)	15
		No load excitation current (io) (A)	1
		Full load excitation current (ic) (A)	4.2
		Full load excitation voltage (uc) (V)	19
		Recovery time (Delta U = 20% transient) (ms)	500
		Engine start (Delta U = 20% perm. or 50% trans.) (kVA)	227.9
		Transient dip (4/4 load) - PF : 0,8 AR (%)	14.3
		No load losses (W)	1800
		Heat rejection (W)	8500

NEXYS, comprehensive and simple

TELYS, ergonomic and user-friendly



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.

Alarms and faults: oil pressure, coolant temperature, failure to start, overspeed (> 60 kVA), charging alternator fault, low fuel level, emergency stop.

For more information, please refer to the sales documentation.

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, coolant temperature, fuel level, engine speed, battery voltage.

Alarms and faults: oil pressure, coolant temperature, failure to start, overspeed, alternator min./max., battery voltage min./max., emergency stop, fuel level.

Ergonomics: wheel for navigating around the various menus.

Communication: remote control and operation software, USB connections, PC connection.

Automatic control: automatic start.

For more information on the product and its options, please refer to the sales documentation.