J66C2

Motor type	4045TFS70
Alternator type	LSA432M45

DESCRIPTIVE

- Mechanic governor
- Mechanically welded chassis with antivibration suspension
- Main line circuit breaker
- Radiator for wiring temperature of 48/50℃ max wit h mechanical fan
- 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℃
- Manual for use and installation

GENERAL CHARACTERISTICS

Frequency (Hz)	50
Reference voltage (V)	T51A2
Max power (kVA)	66
Max power ESP (kWe)	52.8
Max power ESP (kVA)	60
Max power PRP (kWe)	48
Intensity (A)	95
Standard Control Panel	NEXYS
Optional control panel	TELYS

DIMENSIONS AND NOISE LEVELS

DIMENSIONS COMPACT VERSION

Length (mm)	1870
Width (mm)	994
Height (mm)	1360
Dry weight (kg)	1000
Tank capacity (L)	180

DIMENSIONS SOUNDPROOFED VERSION

Canopy	M128
Length (mm).	2300
Width (mm).	1060
Height (mm).	1680
Dry weight (kg).	1470
Tank capacity (L).	180
dB(A)@1m (50Hz)	71
LWa (50Hz)	88

POWERS

Voltage	ESP		PRP		Standby Amps
	kWe	kVA	kWe	kVA	
415/240	53	66	48	60	92
400/230	53	66	48	60	95
380/220	53	66	48	60	100
240 TRI	53	66	48	60	159
230 TRI	53	66	48	60	166
220 TRI	53	66	48	60	173
220/127	53	66	48	60	173
200/115	53	66	48	60	191

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℃ Air Intlet Temp. 1 000 m A.S.L. 60% relative humidity.

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TECHNICAL DESCRIPTION

GENERAL ENGINE DATAS

Motor model	JOHN DEERE 4045TFS70 , 4-temps, TURBO , N/A 4 X
Cylinder arrangement	L
Displacement (C.I.)	4.48
Bore (mm) x Stroke (mm)	106 x 127
Compression ratio	N/A
Speed (RPM)	1500
Pistons speed (m/s)	6.35
Maximum stand-by power at rated RPM (kW)	60.5
Frequency regulation (%)	0.5
BMEP (bar)	9.81
Governor type	MECA

COOLING SYSTEM

Radiator & Engine capacity (L)	8.5
Max water temperature (°C)	105
Outlet water temperature (°C)	N/A
Fan power (kW)	3.33
Fan air flow w/o restriction (m3/s)	N/A
Available restriction on air flow (mm CE)	20
Type of coolant	GENCOOL
Thermostat (°C)	82-94

EMISSIONS

Emissions PM (g/kW.h)	0.3
Emission CO (g/kW.h)	1.04
Emissions HCNOx (g/kWh)	N/A
Emission HC (g/kW.h)	0.47

EXHAUST

Exhaust gas temperature (°C)	535
Exhaust gas flow (L/s)	195
Max. exhaust back pressure (mm CE)	750

FUEL

Consumption @ 110% load (L/h)	16.09
Consumption @ 100% load (L/h)	14.75
Consumption @ 75% load (L/h)	11.26
Consumption @ 50% load (L/h)	7.41
Maximum fuel pump flow (L/hr)	N/A

OIL

Oil capacity (L)	N/A
Min. oil pressure (bar)	N/A
Max. oil pressure (bar)	N/A
Oil consumption 100% load (L/h)	0.04
Carter oil capacity (L)	N/A

HEAT BALANCE

Heat rejection to exhaust (kW)	45.74
Radiated heat to ambiant (kW)	7.38
Haet rejection to coolant (kW)	39

AIR INTAKE

Max. intake restriction (mm CE)	300
Intake air flow (L/s)	83.33

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ALTERNATOR SPECIFICATIONS

GENERAL DATAS

Alternator brand	LEROY SOMER
Alternator type	LSA432M45
Number of phase	3
Power factor (Cos Phi)	0.8
Altitude (m)	0-1000
Overspeed (rpm)	2250
Number of pole	4
Excitation system	SHUNT
Insulation class / T°class, continuous 40℃	H / H-125
Regulation	R230
Harmonic factor, no load 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 at established rating (%)	0.5
Recovery time (Delta U = 20% transitoire) (ms)	500

OTHER DATAS

Continuous Nominal Rating 40℃ (kVA)	60
Standby Rating 27℃ (kVA)	66
Efficiencies 4/4 load (%)	89
Air flow (m3/s)	0.27
Short circuit ratio (Kcc)	0.39
Direct axis synchro reactance unsaturated (Xd) (%)	304
Quadra axis synchro reactance unsaturated (Xq) (%)	182
Open circuit time constant (T'do) (ms)	1270
Direct axis transient reactance saturated (X'd) (%)	11.9
Short circuit transient time constant (T'd) (ms)	50
Direct axis subtransient reactance saturated (X''d) (%)	5.9
Subtransient time constant (T''d) (ms)	5
Quadra axis subtransient reactance saturated (X''q) (%)	7.4
Zero sequence reactance unsaturated (Xo) (%)	0.5
Negative sequence reactance saturated (X2) (%)	6.7
Armature time constant (Ta) (ms)	8
No load excitation current (io) (A)	0.4
Full load excitation current (ic) (A)	1.6
Full load excitation voltage (uc) (V)	30
Recovery time (Delta U = 20% transitoire) (ms)	500
Motor start (Delta U = 20% perm. or 50% trans.) (kVA)	156
Transient dip (4/4 charge) - PF : 0,8 AR (%)	15.5
No load losses (W)	1120
Heat rejection (W)	5890

DIMENSIONS AND NOISE LEVELS

CONTAINMENT

Canopy	M128 DW
Length (mm).	2344
Width (mm).	1060
Height (mm).	1900
Dry weight (kg).	1697
Tank capacity (L).	390
dB(A)@1m (50Hz)	73.3
LWa (50Hz)	88

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CONTROL PANEL

NEXYS, comprehensive and simple

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.

TELYS, ergonomic and user-friendly

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.

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

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