

J22

Engine JOHN DEERE , 3029DF120
Alternator MECC ALTE , ECO28-1L

STANDARD FEATURES

- Mechanic governor
- Mechanically welded chassis with antivibration suspension
- Main line circuit breaker
- Radiator for wiring temperature of 48/50°C max with 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°C
- Manual for use and installation



Voltage	Power ESP kWe/kVA	Power PRP kWe/kVA	Standby Amps	Dimensions	Weight
415/240	18 / 22	16 / 20	31		
400/230	18 / 22	16 / 20	32	Leng : 1700mm [67in]	720kg [1587lbs] Net
380/220	18 / 22	16 / 20	33	Widt : 896mm [35in]	830kg [1830lbs] Gross
240 TRI	18 / 22	16 / 20	53	Heig : 1221mm [48in]	
230 TRI	18 / 22	16 / 20	55		
220 TRI	18 / 22	16 / 20	58		
220/127	16 / 20	15 / 18	52		
200/115	18 / 22	16 / 20	64		



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.

TERM OF USE

Standard reference conditions ESP/PRP 25 C°/25 C° Air Intlet Temp, 1000 m/1000 m m A.S.L. 60 % relative humidity.

Model	dB(A)@1m	dB(A)@7m	Dimensions	Weight	Tank
 M127-DW	74.9	65	Leng : 2160mm [85in] Widt : 966mm [38in] Heig : 1582mm [62in]	1130kg [2491lbs] 1350kg [2976lbs]	230 L
 M127	74.9	65	Leng : 2080mm [82in] Widt : 960mm [38in] Heig : 1415mm [56in]	950kg [2094lbs] 1050kg [2315lbs]	100 L



ENGINE SPECIFICATIONS

DATA GENERAL DATA	Motor model	JOHN DEERE 3029DF120 , 4-temps, ATHMO , N/A 3 X
	Cylinder arrangement	L
	Displacement (C.I.)	2.91
	Bore (mm) X Stroke (mm)	106 X 110
	Compression ratio	17.8 : 1
	Speed (RPM)	1500
	Pistons speed (m/s)	5.5
	Maximum stand-by power at rated RPM (kW)	29.7
	Frequency regulation (%)	2.5
	BMEP (bar)	7.42
	Governor type	MECA
EXHAUST SYSTEM	Exhaust gas temperature (°F)	555
	Exhaust gas flow (L/s)	78
	Max. exhaust back pressure (mm CE)	625
FUEL SYSTEM	Consumption @ 110% load (L/h)	8.5
	Consumption @ 100% load (L/h)	7
	Consumption @ 75% load (L/h)	5
	Consumption @ 50% load (L/h)	3.6
	Maximum fuel pump flow (L/hr)	111
OIL	Oil capacity (L)	6
	Min. oil pressure (bar)	1
	Max. oil pressure (bar)	5
	Oil consumption 100% load (L/h)	0.007
	Carter oil capacity (L)	5.3
THERMAL BALANCE	Heat rejection to exhaust (kW)	31
	Radiated heat to ambient (kW)	6
	Heat rejection to coolant (kW)	18
AIR INTAKE	AIR INTAKE_entree_max%	300
	Intake air flow (L/s)	28
COOLANT SYSTEM	Radiator & Engine capacity (L)	16.1
	Max water temperature (°C)	105
	Outlet water temperature (°C)	93
	Fan power (kW)	1.5
	Fan air flow w/o restriction (m3/s)	1.74
	Available restriction on air flow (mm CE)	20
	Type of coolant	GENCOOL
	Thermostat (°C)	82-94
EMISSIONS	Emissions PM (g/kW.h)	N/A
	Emission CO (g/kW.h)	N/A
	Emissions HCNOx (g/kWh)	N/A
	Emission HC (g/kW.h)	N/A

This document is not contractual - The SDMO company reserves the right to modify any of the characteristics stated in this CD Rom without notice, in a constant effort to improve the quality of its products.

SDMO Industries – 12bis rue de la Villeneuve – CS 92848 – 29 228 BREST CEDEX 2

Tel +33 (0)2 98 41 41 41 – Fax : +33 (0)2 98 41 63 07 – www.sdmo.com



ALTERNATOR SPECIFICATIONS

DATA GENERAL DATA	Alternator brand	MECC ALTE
	Alternator	ECO28-1L
	Number of phase	3
	Power factor (Cos Phi)	0.8
	Altitude (m)	1000
	Overspeed (rpm)	N/A
	Number of pole	4
	Excitation system	NO
	Insulation class / Temperature class	H / H
	Regulation	AVR
	Total harmonics TGH/THC	N/A
	Wave form : NEMA=TIF-TGH/THC	N/A
	Wave form : CEI=FHT-TGH/THC	N/A
	Number of bearing	1
	Coupling	DIRECT
	Voltage regulation 0 à 100%	N/A
	Recovery time (Delta U = 20% transitoire) (ms)	N/A
OTHER DATA	Continuous Nominal Rating 40°C (kVA)	20
	Standby Rating 27°C (kVA)	20
	Efficiencies 4/4 load (%)	84.2
	Air flow (m3/s)	0.088
	Short circuit ratio (Kcc)	0.65
	Direct axis synchro reactance unsaturated (Xd) (%)	175
	Quadra axis synchro reactance unsaturated (Xq) (%)	76
	Open circuit time constant (T'do) (ms)	0.87
	Direct axis transient reactance saturated (X'd) (%)	16.5
	Short circuit transient time constant (T'd) (ms)	0.045
	Direct axis subtransient reactance saturated (X''d) (%)	9.4
	Subtransient time constant (T''d) (ms)	0.015
	Quadra axis subtransient reactance saturated (X''q) (%)	21
	Zero sequence reactance unsaturated (Xo) (%)	3.2
	Negative sequence reactance saturated (X2) (%)	14.2
	Armature time constant (Ta) (ms)	0.013
	No load excitation current (io) (ms)	N/A
	Full load excitation current (ic) (A)	N/A
	Full load excitation voltage (uc) (A)	N/A
	Recovery time (Delta U = 20% transitoire) (ms)	N/A
	Motor start (Delta U = 20% perm. or 50% trans.) (ms)	N/A
	Transient dip (4/4 charge) - PF : 0,8 AR (%)	N/A
	No load losses (kW)	N/A
Heat rejection (kW)	N/A	

This document is not contractual - The SDMO company reserves the right to modify any of the characteristics stated in this CD Rom without notice, in a constant effort to improve the quality of its products.

SDMO Industries – 12bis rue de la Villeneuve – CS 92848 – 29 228 BREST CEDEX 2

Tel +33 (0)2 98 41 41 41 – Fax : +33 (0)2 98 41 63 07 – www.sdmo.com

CONTROL PANEL

Standard

NEXYS



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



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