



J30UM

DIESEL GENSET

MODEL	J30UM
Stand-by Power @ 60Hz	28kW / 28 kVA
Prime Power @ 60Hz	25 kW / 25 kVA

Standard Features

General features :

- Engine (JOHN DEERE , 3029DF120)
- Charge alternator 12 V , Governor:Meca
- Alternator (MECC ALTE , ECO 32-3S)
- Single bearing alternator IP 21 , insulation class H /H
- Radiator 50°C [122°F]°C max. T° air inlet with coolant cap
- Skid and vibration isolators
- Dry type air filter
- Main line circuit breaker
- Microprocessor control panel
- 12 V battery, rack and cable
- Industrial silencer (loose)
- User manual ^pCSA Certified (consult us)



Generator Ratings

Voltage	HZ	Phase	P.F	Standby Amps	Standby Ratings kW/kVA	Prime Ratings kW/kVA
240MONO	60	1	1	117	28 / 28	25 / 25

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.

Conditions of sale

- SDMO provides a full line of products with high quality recognized engines and alternators.
- Service and parts are available from SDMO distributors as a single source of responsibility.
- Each and every units is factory tested. All generator sets are also prototype tested.
- Warranty according to our standard conditions. Five years extended also available



ENGINE DATA

Manufacturer / Model	JOHN DEERE 3029DF120 , 4-cycle, Athmo , N/A
Cylinder Arrangement	3 X L
Displacement	2.9L [177.0C.I.]
Bore and Stroke	106mm [4.2in.] X 110mm [4.3in.]
Compression ratio	17,8 : 1
Rated RPM	1800 Rpm
Piston Speed	6.6m/s [21.7ft./s]
Max. stand by Power at rated RPM	33.5kW [45BHP]
Frequency regulation, steady state	+/-2, 5%
BMEP	7.1bar [103psi]
Governor : type	Meca

Exhaust System

Exhaust gas flow	102L/s [216cfm]
Exhaust temperature	570°C [1058°F]
Max back pressure	625mm CE [25in. WG]

Fuel System

110% (Stand By power)	9L/h [2.4gal/hr]
100% (of the Prime Power)	7.9L/h [2.1gal/hr]
75% (of the Prime Power)	6.3L/h [1.7gal/hr]
50% (of the Prime Power)	4.5L/h [1.2gal/hr]
Total fuel flow	108L/h [28.5gal/hr]

Oil System

Total oil capacity w/filters	6L [1.6gal]
Oil Pressure low idle	1bar [14.5psi]
Oil Pressure rated RPM	5bar [72.5psi]
Oil consumption 100% load	0.008L/h [0.0gal/hr]
Oil capacity carter	5.3L [1.4gal]

Thermal balance 100% load

Heat rejection to exhaust	31kW [1763Btu/mn]
Radiated heat to ambient	7kW [398Btu/mn]
Heat rejection to coolant	20kW [1137Btu/mn]

Air intake

Max. intake restriction	300mm CE [12in. WG]
Engine air flow	36L/s [76cfm]

Coolant System

Radiator & engine capacity	16.1L [4.3gal]
Max water temperature	105°C [221°F]
Outlet water temperature	93°C [199°F]
Fan power	2 kW
Fan air flow	2.22m ³ /s [4704cfm]
Available restriction on air flow	20mm CE [0.8in. WG]
Type of coolant	Gencool
Thermostat	82-94 °C

Emissions

HC	N/A
CO	N/A
Nox	N/A
PM	N/A



ALTERNATOR SPECIFICATIONS

GENERAL DATA

- Compliance with NEMA MG21, UTE NF C51.111, VDE 0530, BS 4999, CSA standards.
- Vacuum-impregnated windings with epoxy varnish.
- IP21 drip proof.

ALTERNATOR DATA

	MECC ALTE ECO 32-3S
Manufacturer / Type	
Number of phase	3
Power factor (Cos Phi)	0.8
Altitude	1000
Overspeed	rpm
Pole : number	4
Exciter type	No
Insulation : class, temperature rise	H / H
Voltage regulator	AVR
Sustained short circuit current	
Total harmonics (TGH/THC)	
Wave form : NEMA = TIF – TGH/THC	
Wave form : CEI = FHT – TGH/THC	
Bearing : number	1
Coupling	Direct
Voltage regulation 0 to 100% load	
Recovery time (20% Volt dip) ms	ms
SkVA with 90 % of nominal sustained voltage (at 0.4 PF)	N/A

OTHER ALTERNATOR DATA

	48 kVA
Continuous nominal rating @ 40°C	48 kVA
Standby rating @ 27°C	52.8 kVA
Efficiencies @ 4/4 load	88.8 %
Air flow	14.5m ³ /s [30723.62cfm]
Short circuit ratio;50 (Kcc)	0.8
Direct axis synchro reactance unsaturated (Xd)	190 %
Quadra axis synchro reactance unsaturated (Xq)	98 %
Open circuit time constant;50 (T'do)	1.4 ms
Direct axis transient reactance saturated (X'd)	14.3 %
Short circuit transient time constant (T'd)	61 ms
Direct axis subtransient reactance saturated (X''d)	10 %
Subtransient time constant (T''d)	15 ms
Quadra axis subtransient reactance saturated (X''q)	30.6 %
Zero sequence reactance unsaturated (Xo)	2.7 %
Negative sequence reactance saturated (X2)	21.5 %
Armature time constant (Ta)	31 ms
No load excitation current (io)	A
Full load excitation current (ic)	A
Full load excitation voltage (uc)	V
Recovery time (Delta U = 20% transitoire)	ms
Motor start (Delta = 20% perm. Or 50% trans.)	kVA
Transient dip (4/4 charge) – PF : 1.8 AR	%
No load losses	kW
Heat rejection	kW

Control Panels

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

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

Options

Engine and Radiator

- Heat shield protection
- Oil drain extension
- Heavy duty air filter
- Lube oil drain pump
- Radiator core guard
- Battery charger
- Block heater

Alternator

- Anti condensation heater
- Enforced impregnation
- Oversized alternator

Control panel

- • NFPA 110 level 1
- • Paralleling system
- • Remote annunciator
- • Oil temperature shutdown
- Key start panel

Exhaust

- Residential silencer
- Critical silencer
- Flexible exhaust conn.

Literature

- • Parts
- • Maintenance

Fuel

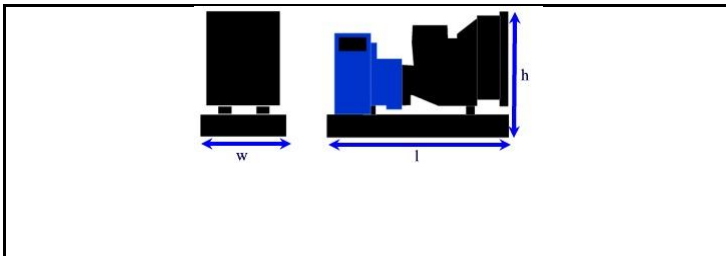
- Day tank
- Subbase fuel tanks UL
- Water separator fuel filter

Enclosure

- M127
- Silent 73 db @ 7m [23 Ft] (stby)

Weight and Dimensions

Open Model Excluding option



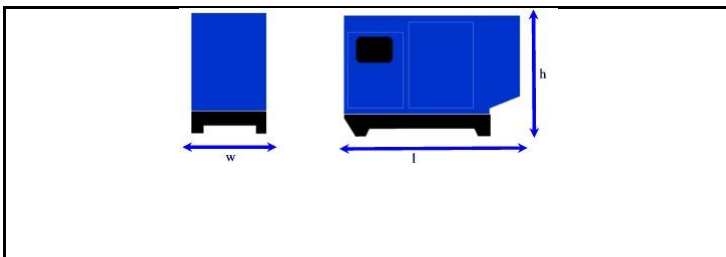
Overall size l x w x h :

1700mm [67in] x 896mm [35in] x 1221mm [48in]

Weight :

800kg [1763lbs] Net 910kg [2006lbs] Brut

With Optional Enclosure



Overall size l x w x h :

2080mm [82in] x 904mm [36in] x 1415mm [56in]

Weight :

1020kg [2248lbs] Net 1130kg [2491lbs] Brut