



**MODEL**  
30 KW/30 kVA  
Stand-by Power @ 60 Hz

**TM30UCM**  
27 kW / 27 kVA  
Prime Power @ 60 Hz

### Standard Features

- Engine (MITSUBISHI , S4S.Y262SD )
- Engine EPA Carb Charge alternator 12 V, Governor: Meca/Mechanical
- 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 cool ant cap
- Skid and vibration isolators
- Dry type air filter
- Microprocessor control panel
- Main line circuit breaker
- 12 V battery, rack and cable
- Industrial silencer (loose)
- User manual  
CSA Certified (consult us)



### Generator ratings

Voltage	HZ	Phase	PF	Stand by Amps	Stand by power kW/kVA	Prime power kW/kVA
240MONO V	60 Hz	1	1	125	30 / 30	27 / 27

Stand-By ratings are available for the duration of any power outage. No overload capacity is specified at this ratings. Prime ratings are available per BS 5514, DIN 6271, ISO-3046 and IEC 34-1 with 10% overload capacity one hour in twelve hours.

### Conditions of sales

- 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.
- Two years limited warranty , please refer to the conditions terms . Five years extended are also available.



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**ENGINE DATA**

Manufacturer / Model	S4S.Y262SD , 4-cycle, Athmo , N/A
Cylinder Arrangement	4 X L
Displacement	3.33L [203.2C.I.]
Bore and Stroke	94mm [3.7in.] X 120mm [4.7in.]
Compression ratio	22 : 1
Rated RPM	1800 Rpm
Piston Speed	7.2m/s [23.6ft./s]
Max. stand by Power at rated RPM	40.04kW [54BHP]
Frequency regulation, steady state	+/- 2. 5%
BMEP	7.28bar [105psi]
Governor : type	Meca/Mechanical

**Exhaust System**

Exhaust gas flow	122L/s [259cfm]
Exhaust temperature	600°C [1112°F]
Max back pressure	680mm CE [27in. WG]

**Fuel System**

110% (Stand By power )	11.5L/h [3.0gal/hr]
100% (of the Prime Power)	9.8L/h [2.6gal/hr]
75% (of the Prime Power)	8.2L/h [2.2gal/hr]
50% (of the Prime Power)	6L/h [1.6gal/hr]
Total fuel flow	36L/h [9.5gal/hr]

**Oil System**

Total oil capacity w/filters	10L [2.6gal]
Oil Pressure low idle	1bar [14.5psi]
Oil Pressure rated RPM	5bar [72.5psi]
Oil consumption 100% load	0.11L/h [0.0gal/hr]
Oil capacity carter	9L [2.4gal]

**Thermal balance 100% load**

Heat rejection to exhaust	35kW [1990Btu/mn]
Radiated heat to ambient	6kW [341Btu/mn]
Heat rejection to coolant	35kW [1990Btu/mn]

**Air intake**

Max. intake restriction	200mm CE [8in. WG]
Engine air flow	45L/s [95cfm]

**Coolant System**

Radiator & engine capacity	8.9L [2.4gal]
Max water temperature	111°C [232°F]
Outlet water temperature	93°C [199°F]
Fan power	1.5 kW
Fan air flow	1m3/s [2119cfm]
Available restriction on air flow	10mm CE [0.4in. WG]
Type of coolant	Gencool
Thermostat	76.5-90 °C

**Emissions**

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



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## 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

Manufacturer / Type	MECC ALTE ECO 32-3S
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

Continuous nominal rating @ 40°C	48 kVA
Standby rating @ 27°C	52.8 kVA
Efficiencies @ 4/4 load	88.8 %
Air flow	14.5m <sup>3</sup> /s [30723.62cfm]
Short circuit ratio (Kcc)	0.8
Direct axis synchro reactance unsaturated (Xd)	190 %
Quadra axis synchro reactance unsaturated (Xq)	98 %
Open circuit time constant (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

### Standard panel : NEXYS



#### Specifications :

Frequency meter, Ammeter, Voltmeter

**Alarms and faults** Oil pressure, water temperature, Overcrank, Overspeed, Min/max alternator, Low fuel level, Emergency stop

#### Engine parameters :

Hours counter, Engine speed, Battery voltage, Fuel level, Air preheating

### Optional panel : 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



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Options

<p><b>Engine and Radiator</b></p> <ul style="list-style-type: none"> <li>▪ Heat shield protection</li> <li>▪ Oil drain extension</li> <li>▪ Heavy duty air filter</li> <li>▪ Lube oil drain pump</li> <li>▪ Radiator core guard</li> <li>▪ Battery charger</li> <li>▪ Block heater</li> </ul>	<p><b>Alternator</b></p> <ul style="list-style-type: none"> <li>▪ Anti condensation heater</li> <li>▪ Enforced impregnation</li> <li>▪ Oversized alternator</li> </ul> <p><b>Exhaust</b></p> <ul style="list-style-type: none"> <li>▪ Residential silencer</li> <li>▪ Critical silencer</li> <li>▪ Flexible exhaust conn.</li> </ul>	<p><b>Control panel</b></p> <ul style="list-style-type: none"> <li>▪ NFPA 110 level 1</li> <li>▪ Paralleling system</li> <li>▪ Remote annunciator</li> <li>▪ Oil temperature shutdown</li> <li>▪ Key start panel</li> </ul>
<p><b>Fuel</b></p> <ul style="list-style-type: none"> <li>▪ Day tank</li> <li>▪ Subbase fuel tanks UL</li> <li>▪ Water separator fuel filter</li> </ul>	<p><b>Enclosure M107</b></p> <ul style="list-style-type: none"> <li>▪ Silent 70 db @ 23 Ft (stby)</li> </ul>	<p><b>Literature</b></p> <ul style="list-style-type: none"> <li>▪ Parts</li> <li>▪ Maintenance</li> </ul>

**Weight and Dimensions**

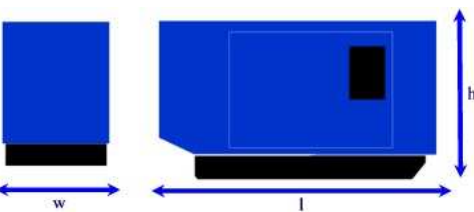
**Open Model**



Overall size l x w x h :  
1515mm [60in] x 780mm [31in] x 1120mm [44in]

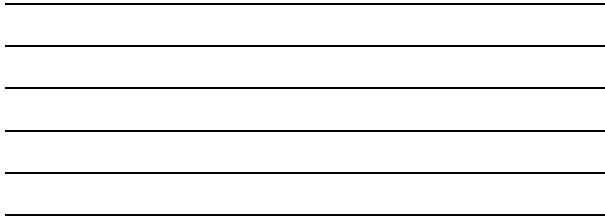
Weight :  
634kg [1397lbs] Net 744kg [1640lbs] Brut

**With Optional Enclosure**



Overall size l x w x h :  
2100mm [83in] x 920mm [36in] x 1445mm [57in]

Weight :  
1005kg [2215lbs] Net 1105kg [2435lbs] Brut



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