



T30UCM

DIESEL GENSET

| MODEL | T30UCM |
|-----------------------|----------------|
| Stand-by Power @ 60Hz | 30kW / 30 kVA |
| Prime Power @ 60Hz | 27 kW / 27 kVA |

Standard Features

General features :

- Engine (MITSUBISHI , S4S.Y262SD)
- Engine EPA Carb 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 | 125 | 30 / 30 | 27 / 27 |

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 | MITSUBISHI 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 |

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 |



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

| Continuous nominal rating @ 40°C | 48 kVA |
|---|------------------------|
| Standby rating @ 27°C | 52.8 kVA |
| Efficiencies @ 4/4 load | 88.8 % |
| Air flow | 14.5m3/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

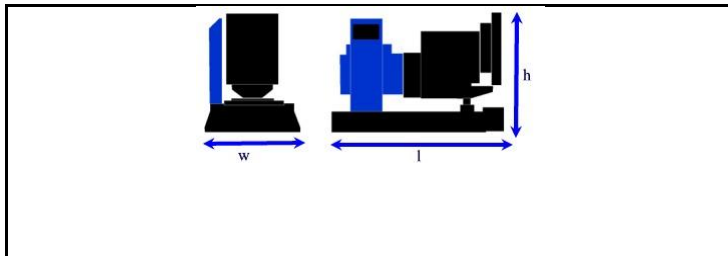
- Day tank
- Subbase fuel tanks UL
- Water separator fuel filter

Enclosure

- M127
- Silent 67.4 db @ 7m [23 Ft] (stby)

Weight and Dimensions

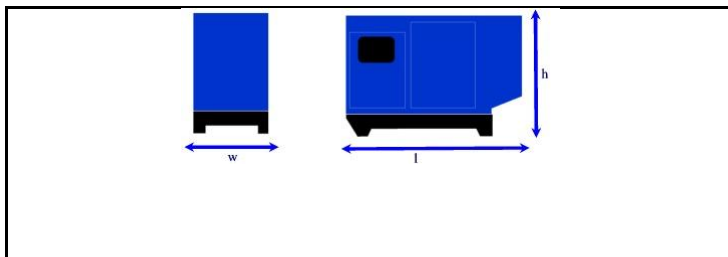
Open Model Excluding option



Overall size l x w x h :
1700mm [67in] x 896mm [35in] x 1144mm [45in]

Weight :
710kg [1565lbs] Net 820kg [1807lbs] Brut

With Optional Enclosure



Overall size l x w x h :
2080mm [82in] x 904mm [36in] x 1415mm [56in]

Weight :
940kg [2072lbs] Net 1050kg [2314lbs] Brut