



T16UM

Engine MITSUBISHI , S4L2-SD
Alternator MECC ALTE , ECO 28 1L/4

STANDARD FEATURES

- Mechanical governor
- Mechanically welded chassis with antivibration suspension
- Power circuit breaker
- Radiator for wiring T° of 50°C [122°F] max with mechanical fan
- Protective grille for fan and rotating parts
- 9dB(A) silencer supplied separately
- Charged DC starting battery with electrolyte
- 12 V charging alternator and starter
- Supplied with oil and coolant -30°C
- User manual and commissioning guide



| Voltage | Power ESP kWe/kVA | Power PRP kWe/kVA | Standby Amps | Dimensions | Weight |
|---------|----------------------|----------------------|-----------------|---|---|
| 240MONO | 15.0 / 15.0 | 13.6 / 13.6 | 62.5 | Length: 1405mm [55in] Width: 715mm [28in] Height: 1053mm [41in] | 452kg [996 lbs] Net 506kg [1116 lbs] Gross |



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. 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.

TERM OF USE

Standard reference conditions 25 °C Air Intlet Temp, 100 m A.S.L. 60 % relative humidity. All engine performance data based on the above mentioned maximum continuous ratings.

| Type | dB(A)@1m | dB(A)@7m | Dimensions | Weight | Tank |
|--|----------|----------|---|--|------|
|  M126 | 75 | 65 | Length: 1750mm [69in] Width: 715mm [28in] Height: 1230mm [48in] | 600kg [1323lbs] Net 654kg [1442lbs] Gross | 50 L |
|  M126-DW | 75 | 65 | Length: 1797mm [71in] Width: 775mm [31in] Height: 1391mm [55in] | 679kg [1497lbs] Net 769kg [1695lbs] Gross | 93 L |





ENGINE SPECIFICATIONS

| | | |
|-------------------|------------------------------------|--|
| STANDARD FEATURES | Manufacturer / Model | MITSUBISHI S4L2-SD , 4-strokes, Athmo , [N/A] 4 X |
| | Cylinder Arrangement | L |
| | Displacement | 1.75L [106.8C.I.] |
| | Bore and Stroke | 78mm [3.1in.] X 92mm [3.6in.] |
| | Compression ratio | 22 : 1 |
| | Rated RPM | 1800 Rpm |
| | Piston Speed | 5.52m/s [18.1ft./s] |
| | Max. stand by Power at rated RPM | 19.58kW [26BHP] |
| | Frequency regulation, steady state | +/- 2.5% |
| | BMEP | 6.74bar [98psi] |
| | Governor : type | MECA |
| EXHAUST SYSTEM | Exhaust temperature | 430°C [806°F] |
| | Exhaust gas flow | 58.3L/s [124cfm] |
| | Max back pressure | 700mm CE [28in. WG] |
| FUEL SYSTEM | 110% (Stand By power) | [N/A] |
| | 100% (of the Prime Power) | 5.3L/h [1.4gal/hr] |
| | 75% (of the Prime Power) | 4.2L/h [1.1gal/hr] |
| | 50% (of the Prime Power) | 3.3L/h [0.9gal/hr] |
| | Max. fuel pump flow | 18L/h [4.8gal/hr] |
| OIL SYSTEM | Total oil capacity w/filters | 5.9L [1.6gal] |
| | Oil Pressure low idle | 1bar [14.5psi] |
| | Oil Pressure rated RPM | 4bar [58.0psi] |
| | Oil consumption 100% load | 0.03L/h [0.008gal/hr] |
| | Oil capacity carter | 5.4L [1.4gal] |
| THERMAL BALANCE | Heat rejection to exhaust | 16kW [910Btu/mn] |
| | Radiated heat to ambient | 2.5kW [142Btu/mn] |
| | Heat rejection to coolant | 17kW [967Btu/mn] |
| AIR INTAKE | Max. intake restriction | 200mm CE [8in. WG] |
| | Engine air flow | 21.7L/s [46cfm] |
| COOLANT SYSTEM | Radiator & engine capacity | 4.9L [1.3gal] |
| | Max water temperature | 111°C [232°F] |
| | Outlet water temperature | 93°C [199°F] |
| | Fan power | 0.9 kW |
| | Fan air flow w/o restriction | 0.9m3/s [1907cfm] |
| | Available restriction on air flow | 10mm CE [0.4in. WG] |
| | Type of coolant | Gencool |
| | Thermostat | 82-95 °C |
| EMISSIONS LEVEL | PM | N/A |
| | CO | N/A |
| | Nox | N/A |
| | HC | N/A |

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ALTERNATOR SPECIFICATIONS

| | | |
|---|---|------------------------------------|
| GENERAL DATAS | Manufacturer | MECC ALTE |
| | Type | ECO 28 1L/4 |
| | Number of phase | 1 |
| | Power factor (Cos Phi) | 1 |
| | Altitude | 1000 |
| | Overspeed | [N/A] |
| | Pole : number | 4 |
| | Exciter type | NO |
| | Insulation : class, temperature rise | H / H |
| | Voltage regulator | AVR |
| | Total harmonics (TGH/THC) | [N/A] |
| | Wave form : NEMA = TIF – TGH/THC | [N/A] |
| | Wave form : CEI = FHT – TGH/THC | 2 |
| | Bearing : number | 1 |
| | Coupling | Direct |
| | Voltage regulation 0 to 100% load | [N/A] |
| | Recovery time (20% Volt dip) ms | [N/A] |
| SKVA with 90% of nominal sustained voltage (at 0.4PF) | N/A | |
| OTHER DATAS | Continuous nominal rating @ 40°C | [N/A] |
| | Standby rating @ 27°C | 16 kVA |
| | Efficiencies @ 4/4 load | 84.2 % |
| | Air flow | 0.096m ³ /s [203.41cfm] |
| | Short circuit ratio;50 (Kcc) | 0.65 |
| | Direct axis synchro reactance unsaturated (Xd) | 175 % |
| | Quadra axis synchro reactance unsaturated (Xq) | 76 % |
| | Open circuit time constant;50 (T'do) | 0.87 ms |
| | Direct axis transient reactance saturated (X'd) | 16.5 % |
| | Short circuit transient time constant (T'd) | 0.045 ms |
| | Direct axis subtransient reactance saturated (X''d) | 9.4 % |
| | Subtransient time constant (T''d) | 0.015 ms |
| | 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) | 0.013 ms |
| | No load excitation current (io) | [N/A] |
| | Full load excitation current (ic) | [N/A] |
| | Full load excitation voltage (uc) | [N/A] |
| | Recovery time (Delta U = 20% transitoire) | [N/A] |
| | Motor start (Delta = 20% perm. Or 50% trans.) | [N/A] |
| | Transient dip (4/4 charge) – PF : 1.8 AR | [N/A] |
| No load losses | [N/A] | |
| Heat rejection | [N/A] | |



CONTROL PANEL

Standard

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



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

