

T30UC4i

Tiers 4 interim
 Engine MITSUBISHI , S4S-Y362SD
 Alternator MECC ALTE , ECO28VL

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 |
|---------|----------------------|----------------------|-----------------|---|--|
| 480/277 | 30 / 38 | 27 / 34 | 46 | Length: 1700mm [67in] Width: 896mm [35in] Height: 1144mm [45in] | 660kg [1455 lbs] Net 760kg [1676 lbs] Gross |
| 440/254 | 30 / 38 | 27 / 34 | 50 | | |
| 240/120 | 29 / 36 | 26 / 33 | 87 | | |
| 230/115 | 26 / 33 | 24 / 30 | 83 | | |
| 220/127 | 30 / 38 | 27 / 34 | 100 | | |
| 208/120 | 29 / 36 | 26 / 33 | 100 | | |



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 Inlet 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 |
|--|----------|----------|---|--|-------|
|  M127 | 76.3 | 66.3 | Length: 2080mm [82in] Width: 960mm [38in] Height: 1415mm [56in] | 890kg [1962lbs] Net 990kg [2183lbs] Gross | 100 L |
|  M127-DW | 76.3 | 66.3 | Length: 2160mm [85in] Width: 966mm [38in] Height: 1582mm [62in] | 1066kg [2350lbs] Net 1296kg [2857lbs] Gross | 230 L |





ENGINE SPECIFICATIONS

| | | |
|-------------------|------------------------------------|--|
| STANDARD FEATURES | Manufacturer / Model | MITSUBISHI S4S-Y362SD , 4-strokes, Athmo , [N/A] 4 X |
| | Cylinder Arrangement | 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 | 34.6kW [46BHP] |
| | Frequency regulation, steady state | +/- 2.5% |
| | BMEP | 6.9bar [100psi] |
| | Governor : type | MECA |
| EXHAUST SYSTEM | Exhaust temperature | 600°C [1112°F] |
| | Exhaust gas flow | 117L/s [248cfm] |
| | Max back pressure | 680mm CE [27in. WG] |
| FUEL SYSTEM | 110% (Stand By power) | 10.7L/h [2.8gal/hr] |
| | 100% (of the Prime Power) | 9.9L/h [2.6gal/hr] |
| | 75% (of the Prime Power) | 7.4L/h [2.0gal/hr] |
| | 50% (of the Prime Power) | 5.1L/h [1.3gal/hr] |
| | Max. fuel pump 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 | 3.9bar [56.5psi] |
| | Oil consumption 100% load | 0.1L/h [0.026gal/hr] |
| | Oil capacity carter | 9L [2.4gal] |
| THERMAL BALANCE | 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 | 8.5L [2.2gal] |
| | Max water temperature | 110°C [230°F] |
| | Outlet water temperature | 105°C [221°F] |
| | Fan power | 1.1 kW |
| | Fan air flow w/o restriction | 1m3/s [2119cfm] |
| | Available restriction on air flow | 10mm CE [0.4in. WG] |
| | Type of coolant | Gencool |
| | Thermostat | 110 °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 | ECO28VL |
| | Number of phase | 3 |
| | Power factor (Cos Phi) | 0.8 |
| | Altitude | 1000 |
| | Overspeed | [N/A] |
| | Pole : number | 4 |
| | Exciter type | NO |
| | Insulation : class, temperature rise | H / H |
| | Voltage regulator | SR7/2 |
| | 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 | 36 kVA |
| | Standby rating @ 27°C | 36.3 kVA |
| | Efficiencies @ 4/4 load | 86.5 % |
| | Air flow | 0.096m ³ /s [203.41cfm] |
| | Short circuit ratio;50 (Kcc) | 0.62 |
| | Direct axis synchro reactance unsaturated (Xd) | 165 % |
| | Quadra axis synchro reactance unsaturated (Xq) | 71 % |
| | Open circuit time constant;50 (T'do) | 0.93 ms |
| | Direct axis transient reactance saturated (X'd) | 15.4 % |
| | Short circuit transient time constant (T'd) | 46 ms |
| | Direct axis subtransient reactance saturated (X''d) | 8.8 % |
| | Subtransient time constant (T''d) | 12 ms |
| | Quadra axis subtransient reactance saturated (X''q) | 19 % |
| | Zero sequence reactance unsaturated (Xo) | 2.8 % |
| | Negative sequence reactance saturated (X2) | 13.2 % |
| | Armature time constant (Ta) | 11 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

