

Model: T44K

Engine: MITSUBISHI, S4S-DT

Alternator: MECC ALTE, ECO 32-3S

Specifications

- Mechanical governor
- Mechanically welded chassis with anti-vibration 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



Generator Ratings

| Voltage | Power ESP kW/kVA | Power RRP kW/kVA | Standby Amps | Dimensions | Weight |
|---------|---------------------|------------------------|-----------------|--|--------------------------|
| 415/240 | 35/44 | 32/40 | 61 | Length: 1700 Width: 896 Height: 1223 | 680kg Net 790kg Gross |
| 400/230 | 35/44 | 32/40 | 64 | | |
| 380/220 | 35/44 | 32/40 | 67 | | |
| 240/120 | 35/44 | 32/40 | 106 | | |
| 230/115 | 35/44 | 32/40 | 110 | | |
| 220/110 | 35/44 | 32/40 | 115 | | |
| 220/127 | 28/35 | 25/32 | 92 | | |
| 200/115 | 35/44 | 32/40 | 127 | | |

RRP: 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 12hour 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.

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

Canopy version

| Type | dB(A)@7m | Dimensions | Weight | Tank |
|---------|----------|--|----------------------------|------|
| M127 | 61.1 | Length: 2080 Width: 960 Height: 1415 | 920kg Net 1020kg Gross | 100L |
| M127-DW | 61.1 | Length: 2160 Width: 966 Height: 1582 | 1100kg Net 1330kg Gross | 230L |

All units supplied with canopy as standard except when requested.

Engine Data

| | |
|------------------------------------|-------------------------------------|
| Manufacturer/Model | mitsubishi S4S-DT, 4-strokes, Turbo |
| Cylinder arrangement | 4 X L |
| Displacement | 3.33L [203.2C.I.] |
| Bore and stroke | 94mm [3.7in.] X 120mm [4.7in.] |
| Compression ratio | 17 : 1 |
| Rated RPM | 1500 Rpm |
| Piston speed | 6m/s [19.7ft./s] |
| Max. standby power at rated RPM | 40.5kW [54BHP] |
| Frequency regulation, steady state | < 5% |
| BMEP | 8.8bar [128psi] |
| Governor: type | MECA |

Exhaust System

| | |
|---------------------|---------------------|
| Exhaust temperature | 550°C [1022°F] |
| Exhaust gas flow | 120L/s [254cfm] |
| Max back pressure | 680mm CE [27in. WG] |

Fuel System

| | |
|---------------------------|---------------------|
| 110% (Stand by power) | 10.9L/h [2.9gal/hr] |
| 100% (of the Prime Power) | 9.6L/h [2.5gal/hr] |
| 75% (of the Prime Power) | 7.3L/h [1.9gal/hr] |
| 50% (of the Prime Power) | 5.1L/h [1.3gal/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 | 0.12L/h [0.032gal/hr] |
| Oil capacity carter | 9L [2.4gal] |

Thermal balance 100% load

| | |
|---------------------------|---------------------|
| Heat rejection to exhaust | 39kW [2218Btu/mn] |
| Radiated heat to ambient | 6kW [341Btu/mn] |
| Heat rejection to coolant | 31.7kW [1802Btu/mn] |

Air intake

| | |
|-------------------------|---------------------|
| Max. intake restriction | 250mm CE [10in. WG] |
| Engine air flow | 45L/s [95cfm] |

Coolant system

| | |
|-----------------------------------|--------------------------------|
| Radiator & engine capacity | 9.5L [2.5gal] |
| Max water temperature | 100°C [212°F] |
| Outlet water temperature | 93°C [199°F] |
| Fan power | 0.7 kW |
| Fan air flow w/o restriction | 1.1m ³ /s [2331cfm] |
| Available restriction on air flow | 10mm CE [0.4in. WG] |
| Type of coolant | Gencool |
| Thermostat | 76.5-90 °C |

Emissions

| | |
|-----|-------|
| PM | [N/A] |
| CO | [N/A] |
| Nox | [N/A] |
| HC | [N/A] |

Alternator Specifications

| | |
|--|-----------------------|
| Manufacturer/Type | MECC ALTE (ECO 32-3S) |
| 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 | AVR |
| SUSTAINED SHORT CIRCUIT CURRENT | [N/A] |
| TOTAL HARMONICS (TGH/THC) | [N/A] |
| WAVE FROM : NEMA = TIF- TGH/THC | [N/A] |
| WAVE FROM: 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 NORMAL SUSTAINED VOLTAGE (AT 0.4PF) | [N/A] |

Other Alternator Data

| | |
|---|------------------------------------|
| CONTINUOUS NOMINAL RATING @ 40° C | 40 kVA |
| STANDBY RATING @ 27° C | 44 kVA |
| EFFICIENCIES @ 4/4 LOAD | 87.4 % |
| AIR FLOW | 0.196m ³ /s [415.30cfm] |
| 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 |

Other Alternator Data Continued

| | |
|---|--------|
| 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 (X ₀) | 2.7 % |
| NEGATIVE SEQUENCE REACTANCE SATURATED (X ₂) | 21.5 % |
| ARMATURE TIME CONSTANT (T _a) | 31 ms |
| NO LOAD EXCITATION CURRENT (i ₀) | [N/A] |
| FULL LOAD EXCITATION VOLTAGE (u _c) | [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 : 1.8AR | [N/A] |
| NO LOAD LOSSES | [N/A] |
| HEAT REJECTION | [N/A] |