

**Model: T16K**

**Engine: MITSUBISHI, S4L2-SD**

**Alternator: MECC ALTE, ECO3-3LN**

## 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	12.8/16.0	11.6/14.5	22.3	Length: 1405 Width: 715 Height: 1053	406kg Net 460kg Gross
400/230	12.8/16.0	11.6/14.5	23.1		
380/220	12.8/16.0	11.6/14.5	24.3		
240/120	12.8/16.0	11.6/14.5	38.5		
230/115	12.8/16.0	11.6/14.5	40.2		
220/110	12.8/16.0	11.6/14.5	42.0		
220/127	10.8/13.5	9.8 /12.3	35.4		
200/115	12.8/16.0	11.6/14.5	46.2		

**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
M126	60.7	Length: 1750 Width: 715 Height: 1230	554kg Net 608kg Gross	50L
M126-DW	60.7	length: 1797 Width: 775 Height: 1391	633kg Net 723kg Gross	93L

All units supplied with canopy as standard except when requested.

### Engine Data

Manufacturer/Model	MITSUBISHI S4L2-SD , 4-strokes, Athmo
Cylinder arrangement	3 X L
Displacement	1.75L [106.8C.I.]
Bore and stroke	78mm [3.1in.] X 92mm [3.6in.]
Compression ratio	22:1
Rated RPM	1500 Rpm
Piston speed	4.6m/s [15.1ft./s]
Max. standby power at rated RPM	16.61kW [22BHP]
Frequency regulation, steady state	+/- 2.5%
BMEP	6.86bar [99psi]
Governor: type	MECA

### Exhaust System

Exhaust temperature	410°C [770°F]
Exhaust gas flow	48.7L/s [103cfm]
Max back pressure	700mm CE [28in. WG]

### Fuel System

110% (Stand by power)	[N/A]
100% (of the Prime Power)	4.4L/h [1.2gal/hr]
75% (of the Prime Power)	3.4L/h [0.9gal/hr]
50% (of the Prime Power)	2.6L/h [0.7gal/hr]
Total fuel 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	0.025L/h [0.007gal/hr]
Oil capacity carter	5.4L [1.4gal]

## Thermal balance 100% load

Heat rejection to exhaust	14kW [796Btu/mn]
Radiated heat to ambient	2kW [114Btu/mn]
Heat rejection to coolant	14kW [796Btu/mn]

## Air intake

Max. intake restriction	200mm CE [8in. WG]
Engine air flow	18.2L/s [39cfm]

## 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	0.5 kW
Fan air flow w/o restriction	0.8m <sup>3</sup> /s [1695cfm]
Available restriction on air flow	10mm CE [0.4in. WG]
Type of coolant	Gencool
Thermostat	82-95 °C

## Emissions

PM	100 mg/Nm <sup>3</sup>
CO	120 mg/Nm <sup>3</sup>
Nox	1350 mg/Nm <sup>3</sup>
HC	40 mg/Nm <sup>3</sup>

## Alternator Specifications

Manufacturer/Type	MECC ALTE (ECO3-3LN)
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
SUSTAINED SHORT CIRCUIT CURRENT	[N/A]
TOTAL HARMONICS (TGH/THC)	[N/A]
WAVE FROM : NEMA = TIF- TGH/THC	2
WAVE FROM: CEI = FHT - TGH/THC	1
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	19 kVA
STANDBY RATING @ 27° C	21 kVA
EFFICIENCIES @ 4/4 LOAD	85 %
AIR FLOW	0.05m <sup>3</sup> /s [105.94cfm]
SHORT CIRCUIT RATIO: 50 (Kcc)	1.1
DIRECT AXIS SYNCHRO REACTANCE UNSATURATED (Xd)	140 %
QUADRA AXIS SYNCHRO REACTANCE UNSATURATED (Xq)	78 %
OPEN CIRCUIT TIME CONSTANT: 50 (T'do)	0.84 ms
DIRECT AXIS TRANSIENT REACTANCE SATURATED (X'd)	14.2 %
SHORT CIRCUIT TRANSIENT TIME CONSTANT (T'd)	42 ms

## Other Alternator Data Continued

DIRECT AXIS SUBTRANSIENT REACTANCE SATURATED ( $X'd$ )	9.8 %
SUBTRANSIENT TIME CONSTANT ( $T'd$ )	10.5 ms
QUADRA AXIS SUBTRANSIENT REACTANCE SATURATED ( $X'q$ )	52 %
ZERO SEQUENCE REACTANCE UNSATURATED ( $X_0$ )	5.4 %
NEGATIVE SEQUENCE REACTANCE SATURATED ( $X_2$ )	17.1 %
ARMATURE TIME CONSTANT ( $T_a$ )	10 ms
NO LOAD EXCITATION CURRENT ( $i_o$ )	[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]