

Model: T12K

Engine: Engine MITSUBISHI, S3L2-SD

Alternator: MECC ALTE, ECO3-1L

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	9.2 / 11.5	8.4 / 10.5	16.0	Length:1405 Width:715 Height:1053	387kg Net 438kg Gross
400/230	9.2 / 11.5	8.4 / 10.5	16.6		
380/220	9.2 / 11.5	8.4 / 10.5	17.5		
240/120	9.2 / 11.5	8.4 / 10.5	27.7		
230/115	9.2 / 11.5	8.4 / 10.5	28.9		
220/110	9.2 / 11.5	8.4 / 10.5	30.2		
220/127	7.6 / 9.5	6.9 / 8.6	24.9		
200/115	9.2 / 11.5	8.4 / 10.5	33.2		

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	60.4	Length: 1750 Width: 715 Height: 1230	535kg Net 586kg Gross	50L
M126-DW	60.4	Length: 1797 Width: 775 Height: 1391	615kg Net 705kg Gross	93L

All units supplied with canopy as standard except when requested.

Engine Data

Manufacturer/Model	MITSUBISHI S3L2-SD , 4-strokes, Athmo
Cylinder arrangement	3 X L
Displacement	1.31L [79.9C.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	11.33kW [15BHP]
Frequency regulation, steady state	+/- 2.5%
BMEP	6.24bar [90psi]
Governor: type	MECA

Exhaust System

Exhaust temperature	400°C [752°F]
Exhaust gas flow	36.5L/s [77cfm]
Max back pressure	700mm CE [28in. WG]

Fuel System

110% (Stand by power)	[N/A]
100% (of the Prime Power)	3.1L/h [0.8gal/hr]
75% (of the Prime Power)	2.5L/h [0.7gal/hr]
50% (of the Prime Power)	2.1L/h [0.6gal/hr]
Total fuel flow	18L/h [4.8gal/hr]

Oil System

Total oil capacity w/filters	4.2L [1.1gal]
Oil Pressure low idle	0.5bar [7.2psi]
Oil Pressure rated RPM	4bar [58.0psi]
Oil consumption 100% load	0.018L/h [0.005gal/hr]
Oil capacity carter	3.7L [1.0gal]

Thermal balance 100% load

Heat rejection to exhaust	10kW [569Btu/mn]
Radiated heat to ambient	1kW [57Btu/mn]
Heat rejection to coolant	9.8kW [557Btu/mn]

Air intake

Max. intake restriction	200mm CE [8in. WG]
Engine air flow	13.6L/s [29cfm]

Coolant system

Radiator & engine capacity	4.2L [1.1gal]
Max water temperature	111°C [232°F]
Outlet water temperature	93°C [199°F]
Fan power	0.3 kW
Fan air flow w/o restriction	0.5m ³ /s [1060cfm]
Available restriction on air flow	10mm CE [0.4in. WG]
Type of coolant	Gencool
Thermostat	82-95 °C

Emissions

PM	80 mg/Nm ³
CO	140 mg/Nm ³
Nox	1500 mg/Nm ³
HC	50 mg/Nm ³

Alternator Specifications

Manufacturer/Type	MECC ALTE (ECO3-1L)
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	[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	11 kVA
STANDBY RATING @ 27° C	12 kVA
EFFICIENCIES @ 4/4 LOAD	85.5 %
AIR FLOW	0.055m ³ /s [116.54cfm]
SHORT CIRCUIT RATIO: 50 (Kcc)	0.85
DIRECT AXIS SYNCHRO REACTANCE UNSATURATED (Xd)	222 %
QUADRA AXIS SYNCHRO REACTANCE UNSATURATED (Xq)	71 %
OPEN CIRCUIT TIME CONSTANT: 50 (T'do)	0.82 ms
DIRECT AXIS TRANSIENT REACTANCE SATURATED (X'd)	22.2 %
SHORT CIRCUIT TRANSIENT TIME CONSTANT (T'd)	38 ms

Other Alternator Data Continued

DIRECT AXIS SUBTRANSIENT REACTANCE SATURATED (X'd)	15.7 %
SUBTRANSIENT TIME CONSTANT (T'd)	14 ms
QUADRA AXIS SUBTRANSIENT REACTANCE SATURATED (X'q)	82.5 %
ZERO SEQUENCE REACTANCE UNSATURATED (X ₀)	6.2 %
NEGATIVE SEQUENCE REACTANCE SATURATED (X ₂)	18.9 %
ARMATURE TIME CONSTANT (T _a)	48 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]