

Model: T8K

Engine: MITSUBISHI, L3E-SD

Alternator: MECC ALTE, ECO3-2S

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 guid



Generator Ratings

Voltage	Power ESP kW/kVA	Power RRP kW/kVA	Standby Amps	Dimensions	Weight
415/240	6.0/7.5	5.5/6.8	10.4	Length: 1220 Width: 700 Height: 922	280kg Net 330kg Gross
400/230	6.0/7.5	5.5/6.8	10.8		
380/220	6.0/7.5	5.5/6.8	11.4		
240/120	6.0/7.5	5.5/6.8	18.0		
230/115	6.0/7.5	5.5/6.8	18.8		
220/110	6.0/7.5	5.5/6.8	19.7		
220/127	5.6/7.0	5.1/6.4	18.4		
200/115	6.0/7.5	5.5/6.8	21.7		

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
M125	59	Length: 1482 Width: 760 Height: 1030	390kg Net 440kg Gross	50L

All units supplied with canopy as standard except when requested.

Engine Data

Manufacturer/Model	mitsubishi L3E-SD , 4-strokes, Athmo
Cylinder arrangement	3 x L
Displacement	0.95L [58.0C.I.]
Bore and stroke	76mm [3.0in.] X 70mm [2.8in.]
Compression ratio	23 : 1
Rated RPM	1500 RPM
Piston speed	3.5m/s [11.5ft./s]
Max. standby power at rated RPM	7.37kW [10BHP]
Frequency regulation, steady state	+/- 2.5%
BMEP	5.62bar [81psi]
Governor: type	MECA

Exhaust System

Exhaust temperature	490°C [914°F]
Exhaust gas flow	23.6L/s [50cfm]
Max back pressure	800mm CE [31in. WG]

Fuel System

110% (Stand by power)	[N/A]
100% (of the Prime Power)	2.3L/h [0.6gal/hr]
75% (of the Prime Power)	1.7L/h [0.4gal/hr]
50% (of the Prime Power)	1.3L/h [0.3gal/hr]
Total fuel flow	18L/h [4.8gal/hr]

Oil System

Total oil capacity w/filters	4.1L [1.1gal]
Oil Pressure low idle	0.5bar [7.2psi]
Oil Pressure rated RPM	4bar [58.0psi]
Oil consumption 100% load	0.006L/h [0.002gal/hr]
Oil capacity carter	3.6L [1.0gal]

Thermal balance 100% load

Heat rejection to exhaust	7kW [398Btu/mn]
Radiated heat to ambient	0.5kW [28Btu/mn]
Heat rejection to coolant	8kW [455Btu/mn]

Air intake

Max. intake restriction	310mm CE [12in. WG]
Engine air flow	9.9L/s [21cfm]

Coolant system

Radiator & engine capacity	3.7L [1.0gal]
Max water temperature	111°C [232°F]
Outlet water temperature	93°C [199°F]
Fan power	0.2 kW
Fan air flow w/o restriction	0.4m ³ /s [848cfm]
Available restriction on air flow	10mm CE [0.4in. WG]
Type of coolant	Gencool
Thermostat	76.5-90 °C

Emissions

PM	120 mg/Nm ³
CO	250 mg/Nm ³
Nox	960 mg/Nm ³
HC	30 mg/Nm ³

Alternator Specifications

Manufacturer/Type	MECC ALTE (ECO3-2S)
NUMBER OF PHASE	3
POWER FACTOR (Cos Phi)	Power factor (Cos Phi) 0.8
ALTITUDE	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	
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	8 kVA
STANDBY RATING @ 27° C	9 kVA
EFFICIENCIES @ 4/4 LOAD	83.5 %
AIR FLOW	0.0583m ³ /s [123.53cfm]
SHORT CIRCUIT RATIO: 50 (Kcc)	50 (Kcc) 0.78
DIRECT AXIS SYNCHRO REACTANCE UNSATURATED (Xd)	206 %
QUADRA AXIS SYNCHRO REACTANCE UNSATURATED (Xq)	68 %
OPEN CIRCUIT TIME CONSTANT: 50 (T'do)	0.78 ms
DIRECT AXIS TRANSIENT REACTANCE SATURATED (X'd)	18.5 %
SHORT CIRCUIT TRANSIENT TIME CONSTANT (T'd)	18 ms

Other Alternator Data Continued

DIRECT AXIS SUBTRANSIENT REACTANCE SATURATED (X'd)	13.3 %
SUBTRANSIENT TIME CONSTANT (T'd)	72.7 %
QUADRA AXIS SUBTRANSIENT REACTANCE SATURATED (X'q)	6.4 %
ZERO SEQUENCE REACTANCE UNSATURATED (X ₀)	18.3 %
NEGATIVE SEQUENCE REACTANCE SATURATED (X ₂)	13 ms
ARMATURE TIME CONSTANT (T _a)	[N/A]
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]