

T12K

Engine MITSUBISHI , S3L2-SD
Alternator MECC ALTE , ECO3-1L

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
415/240	9.2 / 11.5	8.4 / 10.5	16.0	Length: 1405mm [55in] Width: 715mm [28in] Height: 1053mm [41in]	387kg [853 lbs] Net 438kg [966 lbs] 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		



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 Intlet 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
 M126	70.4	60.4	Length: 1750mm [69in]	535kg [1179lbs] Net	50 L
			Width: 715mm [28in]	586kg [1292lbs] Gross	
			Height: 1230mm [48in]		
 M126-DW	70.4	60.4	Length: 1797mm [71in]	615kg [1356lbs] Net	93 L
			Width: 775mm [31in]	705kg [1554lbs] Gross	
			Height: 1391mm [55in]		



ENGINE SPECIFICATIONS

STANDARD FEATURES	Manufacturer / Model	MITSUBISHI S3L2-SD , 4-strokes, Athmo , [N/A] 3 X
	Cylinder Arrangement	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. stand by 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]
	Max. fuel pump 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	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 LEVEL	PM	80 mg/Nm ³
	CO	140 mg/Nm ³
	Nox	1500 mg/Nm ³
	HC	50 mg/Nm ³



ALTERNATOR SPECIFICATIONS

GENERAL DATAS	Manufacturer	MECC ALTE	
	Type	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	
	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	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	
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 (Xo)		6.2 %	
Negative sequence reactance saturated (X2)		18.9 %	
Armature time constant (Ta)		48 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

