

T9KM

Engine MITSUBISHI , S3L2.SD
Alternator MECC ALTE , ECO3-3LN

STANDARD FEATURES

- Mechanical governor
- Mechanically welded chassis with vibration isolators
- Main line 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 + cables
- 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
240MONO	9 / 9	8 / 8	38	Length: 1405mm [55in]	396kg [873lbs] Net
230MONO	9 / 9	8 / 8	39	Width: 715mm [28in]	447kg [985lbs] Gross
220MONO	9 / 9	8 / 8	41	Height: 1053mm [41in]	


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 Inlet 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]	544kg [1199lbs] Net
				Width: 715mm [28in]	595kg [1311lbs] Gross
				Height: 1230mm [48in]	50 L





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 [0.0gal/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	0.5m3/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/Nm3
	CO	140 mg/Nm3
	Nox	1500 mg/Nm3
	HC	50 mg/Nm3



ALTERNATOR SPECIFICATIONS

GENERAL DATAS	Manufacturer / Type	MECC ALTE ECO3-3LN
	Number of phase	3
	Power factor (Cos Phi)	0.8
	Altitude	1000
	Overspeed	[N/A]
	Pole : number	2
	Exciter type	No
	Insulation : class, temperature rise	H / H
	Voltage regulator	SR7/2
	Sustained short circuit current	[N/A] C
	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
Standby rating @ 27°C		21 kVA
Efficiencies @ 4/4 load		85 %
Air flow		3m3/s [6356.61cfm]
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
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 (Xo)		5.4 %
Negative sequence reactance saturated (X2)		17.1 %
Armature time constant (Ta)		10 ms
No load excitation current (io)		[N/A]
Full load excitation current (ic)		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

