

# T15HK

Engine MITSUBISHI , L3E.SDH  
Alternator SOGA , FT2MBS

## 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
400/230	12 / 15	- / -	22	Length: 1405mm [55in]	294kg [648lbs] Net
230/115	12 / 15	- / -	38	Width: 715mm [28in] Height: 1030mm [41in]	344kg [758lbs] Gross

## 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	80.8	70.8	Length: 1750mm [69in]	442kg [974lbs] Net	50 L
			Width: 715mm [28in] Height: 1230mm [48in]	492kg [1084lbs] Gross	





## ENGINE SPECIFICATIONS

STANDARD FEATURES	Manufacturer / Model	MITSUBISHI L3E.SDH , 4-strokes, Athmo , N/A 3 X
	Cylinder Arrangement	L
	Displacement	0.95L [58.0C.I.]
	Bore and Stroke	76mm [3.0in.] X 70mm [2.8in.]
	Compression ratio	23 : 1
	Rated RPM	3000 Rpm
	Piston Speed	7m/s [23.0ft./s]
	Max. stand by Power at rated RPM	14.85kW [20BHP]
	Frequency regulation, steady state	+/-2. 5%
	BMEP	5.66bar [82psi]
Governor : type	Meca	
EXHAUST SYSTEM	Exhaust temperature	590°C [1094°F]
	Exhaust gas flow	54.3L/s [115cfm]
	Max back pressure	800mm CE [31in. WG]
FUEL SYSTEM	110% (Stand By power )	N/A
	100% (of the Prime Power)	5.1L/h [1.3gal/hr]
	75% (of the Prime Power)	4.2L/h [1.1gal/hr]
	50% (of the Prime Power)	3.2L/h [0.8gal/hr]
	Max. fuel pump 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	0.014L/h [0.0gal/hr]
	Oil capacity carter	3.6L [1.0gal]
THERMAL BALANCE	Heat rejection to exhaust	15kW [853Btu/mn]
	Radiated heat to ambient	2kW [114Btu/mn]
	Heat rejection to coolant	18.6kW [1058Btu/mn]
AIR INTAKE	Max. intake restriction	310mm CE [12in. WG]
	Engine air flow	19.7L/s [42cfm]
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	1.3 kW
	Fan air flow w/o restriction	0.9m3/s [1907cfm]
	Available restriction on air flow	10mm CE [0.4in. WG]
	Type of coolant	Gencool
	Thermostat	76.5-90 °C
EMISSIONS LEVEL	PM	100 mg/Nm3
	CO	250 mg/Nm3
	Nox	790 mg/Nm3
	HC	20 mg/Nm3





## ALTERNATOR SPECIFICATIONS

GENERAL  DATAS	Manufacturer / Type	SOGA FT2MBS
	Number of phase	3
	Power factor (Cos Phi)	0.8
	Altitude	1000
	Overspeed	[N/A]
	Pole : number	2
	Exciter type	[N/A]
	Insulation : class, temperature rise	H / H
	Voltage regulator	[N/A]
	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	16 kVA
	Standby rating @ 27°C	17.6 kVA
	Efficiencies @ 4/4 load	85 %
	Air flow	[N/A]
	Short circuit ratio;50 (Kcc)	0.6
	Direct axis synchro reactance unsaturated (Xd)	[N/A]
	Quadra axis synchro reactance unsaturated (Xq)	[N/A]
	Open circuit time constant;50 (T'do)	[N/A]
	Direct axis transient reactance saturated (X'd)	[N/A]
	Short circuit transient time constant (T'd)	[N/A]
	Direct axis subtransient reactance saturated (X''d)	[N/A]
	Subtransient time constant (T''d)	[N/A]
	Quadra axis subtransient reactance saturated (X''q)	[N/A]
	Zero sequence reactance unsaturated (Xo)	[N/A]
	Negative sequence reactance saturated (X2)	[N/A]
	Armature time constant (Ta)	[N/A]
	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

