

# T30UC4iM

Tiers 4 interim  
 Engine MITSUBISHI , S4S-Y362SD  
 Alternator MECC ALTE , ECO 32-3S

## 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
240MONO	29.0 / 29.0	26.4 / 26.4	120.8	Length: 1700mm [67in] Width: 896mm [35in] Height: 1144mm [45in]	710kg [1565 lbs] Net 820kg [1808 lbs] 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
 M127	76.3	66.3	Length: 2080mm [82in] Width: 960mm [38in] Height: 1415mm [56in]	940kg [2072lbs] Net 1050kg [2315lbs] Gross	100 L
 M127-DW	76.3	66.3	Length: 2160mm [85in] Width: 966mm [38in] Height: 1582mm [62in]	1132kg [2496lbs] Net 1362kg [3003lbs] Gross	230 L





## ENGINE SPECIFICATIONS

STANDARD FEATURES	Manufacturer / Model	MITSUBISHI S4S-Y362SD , 4-strokes, Athmo , [N/A] 4 X
	Cylinder Arrangement	L
	Displacement	3.33L [203.2C.I.]
	Bore and Stroke	94mm [3.7in.] X 120mm [4.7in.]
	Compression ratio	22 : 1
	Rated RPM	1800 Rpm
	Piston Speed	7.2m/s [23.6ft./s]
	Max. stand by Power at rated RPM	34.6kW [46BHP]
	Frequency regulation, steady state	+/- 2.5%
	BMEP	6.9bar [100psi]
	Governor : type	MECA
EXHAUST SYSTEM	Exhaust temperature	600°C [1112°F]
	Exhaust gas flow	117L/s [248cfm]
	Max back pressure	680mm CE [27in. WG]
FUEL SYSTEM	110% (Stand By power )	10.7L/h [2.8gal/hr]
	100% (of the Prime Power)	9.9L/h [2.6gal/hr]
	75% (of the Prime Power)	7.4L/h [2.0gal/hr]
	50% (of the Prime Power)	5.1L/h [1.3gal/hr]
	Max. fuel pump flow	36L/h [9.5gal/hr]
OIL SYSTEM	Total oil capacity w/filters	10L [2.6gal]
	Oil Pressure low idle	1bar [14.5psi]
	Oil Pressure rated RPM	3.9bar [56.5psi]
	Oil consumption 100% load	0.1L/h [0.026gal/hr]
	Oil capacity carter	9L [2.4gal]
THERMAL BALANCE	Heat rejection to exhaust	35kW [1990Btu/mn]
	Radiated heat to ambient	6kW [341Btu/mn]
	Heat rejection to coolant	35kW [1990Btu/mn]
AIR INTAKE	Max. intake restriction	200mm CE [8in. WG]
	Engine air flow	45L/s [95cfm]
COOLANT SYSTEM	Radiator & engine capacity	8.5L [2.2gal]
	Max water temperature	110°C [230°F]
	Outlet water temperature	105°C [221°F]
	Fan power	1.1 kW
	Fan air flow w/o restriction	1m <sup>3</sup> /s [2119cfm]
	Available restriction on air flow	10mm CE [0.4in. WG]
	Type of coolant	Gencool
	Thermostat	110 °C
EMISSIONS LEVEL	PM	N/A
	CO	N/A
	Nox	N/A
	HC	N/A

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## ALTERNATOR SPECIFICATIONS

GENERAL  DATAS	Manufacturer	MECC ALTE
	Type	ECO 32-3S
	Number of phase	1
	Power factor (Cos Phi)	1
	Altitude	1000
	Overspeed	[N/A]
	Pole : number	4
	Exciter type	NO
	Insulation : class, temperature rise	H / H
	Voltage regulator	AVR
	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	32 kVA
	Standby rating @ 27°C	35 kVA
	Efficiencies @ 4/4 load	88.8 %
	Air flow	0.241m3/s [510.65cfm]
	Short circuit ratio;50 (Kcc)	0.8
	Direct axis synchro reactance unsaturated (Xd)	190 %
	Quadra axis synchro reactance unsaturated (Xq)	98 %
	Open circuit time constant;50 (T'do)	1.4 ms
	Direct axis transient reactance saturated (X'd)	14.3 %
	Short circuit transient time constant (T'd)	61 ms
	Direct axis subtransient reactance saturated (X''d)	10 %
	Subtransient time constant (T''d)	15 ms
	Quadra axis subtransient reactance saturated (X''q)	30.6 %
	Zero sequence reactance unsaturated (Xo)	2.7 %
	Negative sequence reactance saturated (X2)	21.5 %
	Armature time constant (Ta)	31 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

