



T1900

Engine MITSUBISHI , S16R-PTA
Alternator LEROY SOMER , LSA512S55

STANDARD FEATURES

- Electronic governor
- Mechanically welded chassis with antivibration suspension
- Radiator for wiring temperature of 48/50°C max with mechanical fan
- Protective grille for fan and rotating parts
- Exhaust compensators with flanges
- 24 V charge alternator and starter
- Delivered with oil and coolant -30°C
- Manual for use and installation



Voltage	Power ESP kWe/kVA	Power PRP kWe/kVA	Standby Amps	Dimensions	Weight
415/240	1520 / 1900	1382 / 1727	2643		
400/230	1520 / 1900	1382 / 1727	2742	Leng : 5497mm [216in]	12891kg [28420lbs] Net
380/220	1520 / 1900	1382 / 1727	2887	Widt : 2286mm [90in]	13516kg [29798lbs] Gross
				Heig : 2479mm [98in]	

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.

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 ESP/PRP 27 C°/40 C° Air Intlet Temp, 1000 m/1000 m m A.S.L. 60 % relative humidity.

Model	dB(A)@1m	dB(A)@7m	Dimensions	Weight	Tank
ISO40	91	81	Leng : 12192mm [480in] Widt : 2438mm [96in] Heig : 2896mm [114in]	19962kg [44009lbs] 20939kg [46163lbs]	500 L



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ENGINE SPECIFICATIONS

DATA GENERAL DATA	Motor model	MITSUBISHI S16R-PTA , 4-temps, TURBO , AIR/WATER 16 X
	Cylinder arrangement	V
	Displacement (C.l.)	65.37
	Bore (mm) X Stroke (mm)	170 X 180
	Compression ratio	14 : 1
	Speed (RPM)	1500
	Pistons speed (m/s)	9
	Maximum stand-by power at rated RPM (kW)	1620
	Frequency regulation (%)	0.25
	BMEP (bar)	18.11
	Governor type	ELEC
EXHAUST SYSTEM	Exhaust gas temperature (°F)	539
	Exhaust gas flow (L/s)	5150
	Max. exhaust back pressure (mm CE)	600
FUEL SYSTEM	Consumption @ 110% load (L/h)	388
	Consumption @ 100% load (L/h)	353
	Consumption @ 75% load (L/h)	266
	Consumption @ 50% load (L/h)	188
	Maximum fuel pump flow (L/hr)	588
OIL	Oil capacity (L)	230
	Min. oil pressure (bar)	2.5
	Max. oil pressure (bar)	5.8
	Oil consumption 100% load (L/h)	1.32
	Carter oil capacity (L)	140
THERMAL BALANCE	Heat rejection to exhaust (kW)	977
	Radiated heat to ambient (kW)	102
	Heat rejection to coolant (kW)	852
AIR INTAKE	AIR INTAKE_entree_max%	400
	Intake air flow (L/s)	1950
COOLANT SYSTEM	Radiator & Engine capacity (L)	345
	Max water temperature (°C)	98
	Outlet water temperature (°C)	95
	Fan power (kW)	40.2
	Fan air flow w/o restriction (m3/s)	33.5
	Available restriction on air flow (mm CE)	20
	Type of coolant	GENCOOL
	Thermostat (°C)	82-94
EMISSIONS	Emissions PM (g/kW.h)	N/A
	Emission CO (g/kW.h)	N/A
	Emissions HCNOx (g/kWh)	N/A
	Emission HC (g/kW.h)	N/A

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ALTERNATOR SPECIFICATIONS

DATA GENERAL DATA	Alternator brand	LEROY SOMER
	Alternator	LSA512S55
	Number of phase	3
	Power factor (Cos Phi)	0.8
	Altitude (m)	<1000
	Overspeed (rpm)	2250
	Number of pole	4
	Excitation system	AREP
	Insulation class / Temperature class	H / H
	Regulation	R449
	Total harmonics TGH/THC	N/A
	Wave form : NEMA=TIF-TGH/THC	<50
	Wave form : CEI=FHT-TGH/THC	<2
	Number of bearing	1
	Coupling	DIRECT
	Voltage regulation 0 à 100%	1
	Recovery time (Delta U = 20% transitoire) (ms)	<700
OTHER DATA	Continuous Nominal Rating 40°C (kVA)	1860
	Standby Rating 27°C (kVA)	2045
	Efficiencies 4/4 load (%)	95.6
	Air flow (m3/s)	2.5
	Short circuit ratio (Kcc)	0.33
	Direct axis synchro reactance unsaturated (Xd) (%)	374
	Quadra axis synchro reactance unsaturated (Xq) (%)	224
	Open circuit time constant (T'do) (ms)	2700
	Direct axis transient reactance saturated (X'd) (%)	33.4
	Short circuit transient time constant (T'd) (ms)	240
	Direct axis subtransient reactance saturated (X''d) (%)	14.8
	Subtransient time constant (T''d) (ms)	22
	Quadra axis subtransient reactance saturated (X''q) (%)	18.4
	Zero sequence reactance unsaturated (Xo) (%)	3.5
	Negative sequence reactance saturated (X2) (%)	16.6
	Armature time constant (Ta) (ms)	39
	No load excitation current (io) (ms)	1.5
	Full load excitation current (ic) (A)	6
	Full load excitation voltage (uc) (A)	63
	Recovery time (Delta U = 20% transitoire) (ms)	<700
	Motor start (Delta U = 20% perm. or 50% trans.) (ms)	3600
	Transient dip (4/4 charge) - PF : 0,8 AR (%)	12
	No load losses (kW)	16
Heat rejection (kW)	64.7	

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CONTROL PANEL

Standard

M80



M80

Specifications : Tachometer, Emergency stop button, client connection terminal strip, EC certified
 Engine parameters : Hours counter, Oil pressure gauge, Water temperature indicator, Oil pressure indicator

Option

TELYS

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

Option

KERYS

KERYS



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
 Additional specifications : Website, Troubleshooting, Assistance and Maintenance, Plotting and logging, Load impact, 8 configurations available, Compliance with international standards...