



R275C2

Engine VOLVO , TAD734GE Stage 2
 Alternator LEROY SOMER , LSA462L6

STANDARD FEATURES

- Analog engine
- Connection terminal block "rental type"
- Four-pole breaker
- 2 point lifting ring with integrated ladder
- Rental specific soundproofed canopy
- Diesel low level
- AREP Leroy-Somer Alternator
- Easy radiator access
- Rain cap



Voltage	Power ESP kWe/kVA	Power PRP kWe/kVA	Standby Amps
400/230	220 / 275	200 / 250	397



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, **1000 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
	M227-DW	77.8	67.8	Long: 4056mm [160in] Wide: 1380mm [54in] Height: 2437mm [96in]	3850kg [lbs] Net 4720kg [lbs] Gross	950 L
	M227	77.8	67.8	Long: 4004mm [158in] Wide: 1380mm [54in] Height: 2360mm [93in]	3130kg [lbs] Net 3520kg [lbs] Gross	390 L

Base Rental Power + options suivantes = Full Rental Power

Double wall and great autonomy tank	Air inlet manifold preheating
Water separator pre-filter	Voltage trimmer
Fixed earth leakage protection with spike	Battery cut-out



ENGINE SPECIFICATIONS

STANDARD FEATURES	Manufacturer / Model	VOLVO TAD734GE , 4-strokes, Turbo , Air/Air DC 6 X
	Cylinder Arrangement	L
	Displacement	7.15L [436.3C.I.]
	Bore and Stroke	130mm [5.1in.] X 108mm [4.3in.]
	Compression ratio	17.1 : 1
	Rated RPM	1500 Rpm
	Piston Speed	6.5m/s [21.3ft./s]
	Max. stand by Power at rated RPM	241kW [323BHP]
	Frequency regulation, steady state	+/- 0.5%
	BMEP	28bar [406psi]
Governor : type	ELEC	
EXHAUST SYSTEM	Exhaust gas flow	557L/s [1180cfm]
	Exhaust temperature	550°C [1022°F]
	Max back pressure	750mm CE [30in. WG]
FUEL SYSTEM	110% (Stand By power)	59.6L/h [15.7gal/hr]
	100% (of the Prime Power)	53.4L/h [14.1gal/hr]
	75% (of the Prime Power)	42.6L/h [11.3gal/hr]
	50% (of the Prime Power)	30.5L/h [8.1gal/hr]
	Max. fuel pump flow	300L/h [79.3gal/hr]
OIL SYSTEM	Total oil capacity w/filters	29L [7.7gal]
	Oil Pressure low idle	1bar [14.5psi]
	Oil Pressure rated RPM	4.5bar [65.2psi]
	Oil consumption 100% load	0.01L/h [0.0gal/hr]
	Oil capacity carter	24L [6.3gal]
THERMAL BALANCE	Heat rejection to exhaust	177kW [10064Btu/mn]
	Radiated heat to ambient	26kW [1478Btu/mn]
	Heat rejection to coolant	129kW [7335Btu/mn]
AIR INTAKE	Max. intake restriction	300mm CE [12in. WG]
	Engine air flow	272L/s [576cfm]
COOLANT SYSTEM	Radiator & engine capacity	N/A
	Max water temperature	103°C [217°F]
	Outlet water temperature	93°C [199°F]
	Fan power	9.2 kW
	Fan air flow w/o restriction	4.8m ³ /s [10172cfm]
	Available restriction on air flow	20mm CE [0.8in. WG]
	Type of coolant	Glycol-Ethylene
	Thermostat	83-95 °C
GAS SYSTEM	HC	0.079 g/KW.h
	CO	0.350 g/KW.h
	Nox	5.014 g/KW.h
	PM	0.049 g/KW.h



ALTERNATOR SPECIFICATIONS

GENERAL DATAS	Manufacturer / Type	LEROY SOMER LSA462L6
	Number of phase	3
	Power factor (Cos Phi)	0.8
	Altitude	< 1000 m
	Overspeed	2250 rpm
	Pole : number	4
	Exciter type	AREP
	Insulation : class, temperature rise	H / H
	Voltage regulator	R448
	Sustained short circuit current	4 AC
	Total harmonics (TGH/THC)	< 2.5%
	Wave form : NEMA = TIF – TGH/THC	< 50
	Wave form : CEI = FHT – TGH/THC	< 2%
	Bearing : number	1
	Coupling	Direct
	Voltage regulation 0 to 100% load	+/- 0.5%
	Recovery time (20% Volt dip) ms	500 ms
SkVA with 90% of nominal sustained voltage (at 0.4PF)	skva	
OTHER DATAS	Continuous nominal rating @ 40°C	250 kVA
	Standby rating @ 27°C	275 kVA
	Efficiencies @ 4/4 load	92.4 %
	Air flow	0.43m ³ /s [911.11cfm]
	Short circuit ratio;50 (Kcc)	0.41
	Direct axis synchro reactance unsaturated (Xd)	327 %
	Quadra axis synchro reactance unsaturated (Xq)	196 %
	Open circuit time constant;50 (T'do)	2105 ms
	Direct axis transient reactance saturated (X'd)	15.5 %
	Short circuit transient time constant (T'd)	100 ms
	Direct axis subtransient reactance saturated (X''d)	9.3 %
	Subtransient time constant (T''d)	10 ms
	Quadra axis subtransient reactance saturated (X''q)	11.5 %
	Zero sequence reactance unsaturated (Xo)	0.7 %
	Negative sequence reactance saturated (X2)	10.4 %
	Armature time constant (Ta)	15 ms
	No load excitation current (io)	1 A
	Full load excitation current (ic)	ic
	Full load excitation voltage (uc)	34 V
	Recovery time (Delta U = 20% transitoire)	500 ms
Motor start (Delta = 20% perm. Or 50% trans.)	504 kVA	
Transient dip (4/4 charge) – PF : 1.8 AR	14.1 %	
No load losses	3.69kW [3.69Kw]	
Heat rejection	16.4 kW	

CONTROL PANEL

Standard



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

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...