



R630C2

Engine VOLVO , TAD1642GE Stage 2
 Alternator LEROY SOMER , LSA472L9

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	504 / 630	458 / 573	909



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
	M230-DW	81.8	71.5	Long: 5083mm [200in] Wide: 1690mm [67in] Height: 2955mm [116in]	5850kg [lbs] Net 7930kg [lbs] Gross	1950 L
	M230	81.8	71.5	Long: 5031mm [198in] Wide: 1690mm [67in] Height: 2922mm [115in]	5300kg [lbs] Net 5940kg [lbs] Gross	610 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 TAD1642GE , 4-strokes, Turbo , Air/Air DC 6 X
	Cylinder Arrangement	L
	Displacement	16.12L [983.7C.I.]
	Bore and Stroke	165mm [6.5in.] X 144mm [5.7in.]
	Compression ratio	16.5 : 1
	Rated RPM	1500 Rpm
	Piston Speed	8.25m/s [27.1ft./s]
	Max. stand by Power at rated RPM	536kW [718BHP]
	Frequency regulation, steady state	+/- 0.5%
	BMEP	24.06bar [349psi]
Governor : type	ELEC	
EXHAUST SYSTEM	Exhaust gas flow	1678L/s [3556cfm]
	Exhaust temperature	494°C [921°F]
	Max back pressure	1000mm CE [39in. WG]
FUEL SYSTEM	110% (Stand By power)	129.75L/h [34.3gal/hr]
	100% (of the Prime Power)	115.93L/h [30.6gal/hr]
	75% (of the Prime Power)	85.21L/h [22.5gal/hr]
	50% (of the Prime Power)	57.10L/h [15.1gal/hr]
	Max. fuel pump flow	180L/h [47.6gal/hr]
OIL SYSTEM	Total oil capacity w/filters	48L [12.7gal]
	Oil Pressure low idle	0.7bar [10.1psi]
	Oil Pressure rated RPM	6.5bar [94.2psi]
	Oil consumption 100% load	0.1L/h [0.0gal/hr]
	Oil capacity carter	42L [11.1gal]
THERMAL BALANCE	Heat rejection to exhaust	426kW [24222Btu/mn]
	Radiated heat to ambient	20kW [1137Btu/mn]
	Heat rejection to coolant	218kW [12395Btu/mn]
AIR INTAKE	Max. intake restriction	500mm CE [20in. WG]
	Engine air flow	676L/s [1433cfm]
COOLANT SYSTEM	Radiator & engine capacity	60L [15.852gal]
	Max water temperature	103°C [217°F]
	Outlet water temperature	93°C [199°F]
	Fan power	11 kW
	Fan air flow w/o restriction	10m ³ /s [21191cfm]
	Available restriction on air flow	30mm CE [1.2in. WG]
	Type of coolant	Glycol-Ethylene
	Thermostat	86-96 °C
GAS SYSTEM	HC	0.12 g/KW.h
	CO	1.2 g/KW.h
	Nox	5.3 g/KW.h
	PM	0.100 g/KW.h



ALTERNATOR SPECIFICATIONS

GENERAL DATAS	Manufacturer / Type	LERROY SOMER LSA472L9
	Number of phase	3
	Power factor (Cos Phi)	0.8
	Altitude	< 1000 m
	Overspeed	2250 rpm
	Pole : number	4
	Exciter type	SHUNT
	Insulation : class, temperature rise	H / H
	Voltage regulator	R230
	Sustained short circuit current	3.7 AC
	Total harmonics (TGH/THC)	< 4%
	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	600 kVA
	Standby rating @ 27°C	660 kVA
	Efficiencies @ 4/4 load	94.5 %
	Air flow	0.9m3/s [1906.98cfm]
	Short circuit ratio;50 (Kcc)	0.37
	Direct axis synchro reactance unsaturated (Xd)	330 %
	Quadra axis synchro reactance unsaturated (Xq)	198 %
	Open circuit time constant;50 (T'do)	1997 ms
	Direct axis transient reactance saturated (X'd)	16.5 %
	Short circuit transient time constant (T'd)	100 ms
	Direct axis subtransient reactance saturated (X''d)	13.2 %
	Subtransient time constant (T''d)	10 ms
	Quadra axis subtransient reactance saturated (X''q)	17.4 %
	Zero sequence reactance unsaturated (Xo)	0.9 %
	Negative sequence reactance saturated (X2)	15.4 %
	Armature time constant (Ta)	15 ms
	No load excitation current (io)	0.9 A
	Full load excitation current (ic)	ic
	Full load excitation voltage (uc)	36 V
	Recovery time (Delta U = 20% transitoire)	500 ms
Motor start (Delta = 20% perm. Or 50% trans.)	1400 kVA	
Transient dip (4/4 charge) – PF : 1.8 AR	12.2 %	
No load losses	6.78kW [6.78Kw]	
Heat rejection	27.49 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...