

# V330K

Engine VOLVO , TAD941GE  
 Alternator LEROY SOMER , LSA462VL12

## STANDARD FEATURES

- Electronic 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
- 24 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
415/240	264 / 330	240 / 300	459	Length: 3160mm [124in] Width: 1340mm [53in] Height: 1761mm [69in]	2850kg [6281lbs] Net 3320kg [7317lbs] Gross
400/230	264 / 330	240 / 300	476		
380/220	264 / 330	240 / 300	501		
240/120	264 / 330	240 / 300	794		
230/115	264 / 330	240 / 300	828		
220/110	264 / 330	240 / 300	866		
200/115	264 / 330	240 / 300	953		


## 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 40 °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
 M228	77.2	67	Length: 4475mm [176in]	3980kg [8772lbs]	470 L
			Width: 1410mm [56in] Height: 2430mm [96in]	Net 4450kg [9808lbs] Gross	





## ENGINE SPECIFICATIONS

STANDARD FEATURES	Manufacturer / Model	VOLVO TAD941GE , 4-strokes, Turbo , Air/Air DC 6 X
	Cylinder Arrangement	L
	Displacement	9.36L [571.2C.I.]
	Bore and Stroke	120mm [4.7in.] X 138mm [5.4in.]
	Compression ratio	17.4:01
	Rated RPM	1500 Rpm
	Piston Speed	6.9m/s [22.6ft./s]
	Max. stand by Power at rated RPM	320kW [429BHP]
	Frequency regulation, steady state	+/-0.5%
	BMEP	26bar [377psi]
	Governor : type	Elec
EXHAUST SYSTEM	Exhaust temperature	519°C [966°F]
	Exhaust gas flow	775L/s [1642cfm]
	Max back pressure	1000mm CE [39in. WG]
FUEL SYSTEM	110% (Stand By power )	75.9L/h [20.1gal/hr]
	100% (of the Prime Power)	68.1L/h [18.0gal/hr]
	75% (of the Prime Power)	50.6L/h [13.4gal/hr]
	50% (of the Prime Power)	35.1L/h [9.3gal/hr]
	Max. fuel pump flow	108L/h [28.5gal/hr]
OIL SYSTEM	Total oil capacity w/filters	33L [8.7gal]
	Oil Pressure low idle	0.7bar [10.1psi]
	Oil Pressure rated RPM	6bar [86.9psi]
	Oil consumption 100% load	0.06L/h [0.0gal/hr]
	Oil capacity carter	28L [7.4gal]
THERMAL BALANCE	Heat rejection to exhaust	224kW [12737Btu/mn]
	Radiated heat to ambient	9kW [512Btu/mn]
	Heat rejection to coolant	129kW [7335Btu/mn]
AIR INTAKE	Max. intake restriction	500mm CE [20in. WG]
	Engine air flow	295L/s [625cfm]
COOLANT SYSTEM	Radiator & engine capacity	41L [10.8gal]
	Max water temperature	103°C [217°F]
	Outlet water temperature	93°C [199°F]
	Fan power	15 kW
	Fan air flow w/o restriction	5.9m <sup>3</sup> /s [12503cfm]
	Available restriction on air flow	20mm CE [0.8in. WG]
	Type of coolant	Glycol-Ethylene
	Thermostat	82-92 °C
EMISSIONS LEVEL	PM	30 mg/Nm <sup>3</sup>
	CO	340 mg/Nm <sup>3</sup>
	Nox	2200 mg/Nm <sup>3</sup>
	HC	30 mg/Nm <sup>3</sup>



## ALTERNATOR SPECIFICATIONS

GENERAL  DATAS	Manufacturer / Type	LEROY SOMER LSA462VL12
	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	3.5 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	+/- 1%
	Recovery time (20% Volt dip) ms	< 500 ms
SkVA with 90% of nominal sustained voltage (at 0.4PF)	N/A	
OTHER  DATAS	Continuous nominal rating @ 40°C	300 kVA
	Standby rating @ 27°C	341 kVA
	Efficiencies @ 4/4 load	93.7 %
	Air flow	0.43m3/s [911.11 cfm]
	Short circuit ratio;50 (Kcc)	0.5
	Direct axis synchro reactance unsaturated (Xd)	273 %
	Quadra axis synchro reactance unsaturated (Xq)	164 %
	Open circuit time constant;50 (T'do)	2260 ms
	Direct axis transient reactance saturated (X'd)	12.1 %
	Short circuit transient time constant (T'd)	105 ms
	Direct axis subtransient reactance saturated (X''d)	7.3 %
	Subtransient time constant (T''d)	10 ms
	Quadra axis subtransient reactance saturated (X''q)	9 %
	Zero sequence reactance unsaturated (Xo)	0.5 %
	Negative sequence reactance saturated (X2)	8.1 %
	Armature time constant (Ta)	16 ms
	No load excitation current (io)	1.1 A
	Full load excitation current (ic)	N/A
	Full load excitation voltage (uc)	35 V
	Recovery time (Delta U = 20% transitoire)	< 500 ms
Motor start (Delta = 20% perm. Or 50% trans.)	850 kVA	
Transient dip (4/4 charge) – PF : 1.8 AR	13 %	
No load losses	4.9kW [4.90Kw]	
Heat rejection	16.7 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



### KERY S

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...

