

V350C2

Engine VOLVO , TAD941GE
Alternator LEROY SOMER , LSA462VL12

STANDARD FEATURES

- Electronic governor
- Mechanically welded chassis with antivibration suspension
- Main line circuit breaker
- Radiator for wiring temperature of 48/50°C max with mechanical fan
- Protective grille for fan and rotating parts
- 9 dB(A) silencer supplied separately
- Charger DC starting battery with electrolyte
- 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	264 / 330	240 / 300	459		
400/230	280 / 350	255 / 318	505	Leng : 3160mm [124in]	2850kg [6283lbs] Net
380/220	280 / 350	255 / 318	532	Widt : 1340mm [53in]	3320kg [7319lbs] Gross
240 TRI	264 / 330	240 / 300	794	Heig : 1761mm [69in]	
230 TRI	280 / 350	255 / 318	879		
220 TRI	280 / 350	255 / 318	919		
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.

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 A.S.L. 60 % relative humidity.

Model	dB(A)@1m	dB(A)@7m	Dimensions	Weight	Tank
 M228-DW	77.2	67	Leng : 4527mm [178in] Widt : 1410mm [56in] Heig : 2700mm [106in]	4320kg [9524lbs] 5688kg [12540lbs]	1368 L
 M228	77.2	67	Leng : 4475mm [176in] Widt : 1410mm [56in] Heig : 2430mm [96in]	3980kg [8774lbs] 4450kg [9811lbs]	470 L



ENGINE SPECIFICATIONS

DATA GENERAL DATA	Motor model	VOLVO TAD941GE , 4-temps, TURBO , AIR/AIR 6
	Cylinder arrangement	X
	Displacement (C.I.)	L
	Bore (mm) X Stroke (mm)	9.36
	Compression ratio	120 X 138
	Speed (RPM)	17.4 : 1
	Pistons speed (m/s)	1500
	Maximum stand-by power at rated RPM (kW)	6.9
	Frequency regulation (%)	320
	BMEP (bar)	0.5
	Governor type	24.77
		ELEC
EXHAUST SYSTEM	Exhaust gas temperature (°F)	519
	Exhaust gas flow (L/s)	775
	Max. exhaust back pressure (mm CE)	1000
FUEL SYSTEM	Consumption @ 110% load (L/h)	75.9
	Consumption @ 100% load (L/h)	68.1
	Consumption @ 75% load (L/h)	50.6
	Consumption @ 50% load (L/h)	35.1
	Maximum fuel pump flow (L/hr)	108
OIL	Oil capacity (L)	33
	Min. oil pressure (bar)	0.7
	Max. oil pressure (bar)	6
	Oil consumption 100% load (L/h)	0.06
	Carter oil capacity (L)	28
THERMAL BALANCE	Heat rejection to exhaust (kW)	224
	Radiated heat to ambient (kW)	9
	Heat rejection to coolant (kW)	129
AIR INTAKE	AIR INTAKE_entree_max%	500
	Intake air flow (L/s)	295
COOLANT SYSTEM	Radiator & Engine capacity (L)	41
	Max water temperature (°C)	103
	Outlet water temperature (°C)	93
	Fan power (kW)	15
	Fan air flow w/o restriction (m3/s)	5.9
	Available restriction on air flow (mm CE)	20
	Type of coolant	GLYCOL
	Thermostat (°C)	82-92
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	LSA462VL12
	Number of phase	3
	Power factor (Cos Phi)	0.8
	Altitude (m)	<1000
	Overspeed (rpm)	2250
	Number of pole	4
	Excitation system	SHUNT
	Insulation class / Temperature class	H / H
	Regulation	R230
	Total harmonics TGH/THC	<4
	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%	0.5
	Recovery time (Delta U = 20% transitoire) (ms)	500
OTHER DATA	Continuous Nominal Rating 40°C (kVA)	300
	Standby Rating 27°C (kVA)	341
	Efficiencies 4/4 load (%)	93.7
	Air flow (m3/s)	0.43
	Short circuit ratio (Kcc)	0.5
	Direct axis synchro reactance unsaturated (Xd) (%)	273
	Quadra axis synchro reactance unsaturated (Xq) (%)	164
	Open circuit time constant (T'do) (ms)	2260
	Direct axis transient reactance saturated (X'd) (%)	12.1
	Short circuit transient time constant (T'd) (ms)	105
	Direct axis subtransient reactance saturated (X''d) (%)	7.3
	Subtransient time constant (T''d) (ms)	10
	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) (ms)	16
	No load excitation current (io) (ms)	1.1
	Full load excitation current (ic) (A)	3.5
	Full load excitation voltage (uc) (A)	35
	Recovery time (Delta U = 20% transitoire) (ms)	500
	Motor start (Delta U = 20% perm. or 50% trans.) (ms)	850
	Transient dip (4/4 charge) - PF : 0,8 AR (%)	13
No load losses (kW)	4.9	
Heat rejection (kW)	16.7	

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CONTROL PANEL

Standard



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...