



ENGINE SPECIFICATIONS

STANDARD FEATURES	Manufacturer / Model	VOLVO TAD1242GE , 4-strokes, Turbo , Air/Air DC 6 X
	Cylinder Arrangement	L
	Displacement	12.13L [740.2C.I.]
	Bore and Stroke	150mm [5.9in.] X 131mm [5.2in.]
	Compression ratio	17.5 : 1
	Rated RPM	1500 Rpm
	Piston Speed	7.5m/s [24.6ft./s]
	Max. stand by Power at rated RPM	387kW [519BHP]
	Frequency regulation, steady state	+/- 0.5%
	BMEP	23.9bar [346psi]
Governor : type	ELEC	
EXHAUST SYSTEM	Exhaust gas flow	1050L/s [2225cfm]
	Exhaust temperature	505°C [941°F]
	Max back pressure	1000mm CE [39in. WG]
FUEL SYSTEM	110% (Stand By power)	89.6L/h [23.7gal/hr]
	100% (of the Prime Power)	81.5L/h [21.5gal/hr]
	75% (of the Prime Power)	59.5L/h [15.7gal/hr]
	50% (of the Prime Power)	40.5L/h [10.7gal/hr]
	Max. fuel pump flow	130L/h [34.3gal/hr]
OIL SYSTEM	Total oil capacity w/filters	35L [9.2gal]
	Oil Pressure low idle	2.5bar [36.2psi]
	Oil Pressure rated RPM	5.5bar [79.7psi]
	Oil consumption 100% load	0.12L/h [0.0gal/hr]
	Oil capacity carter	31L [8.2gal]
THERMAL BALANCE	Heat rejection to exhaust	250kW [14215Btu/mn]
	Radiated heat to ambient	17kW [967Btu/mn]
	Heat rejection to coolant	123kW [6994Btu/mn]
AIR INTAKE	Max. intake restriction	500mm CE [20in. WG]
	Engine air flow	416L/s [882cfm]
COOLANT SYSTEM	Radiator & engine capacity	44L [11.625gal]
	Max water temperature	103°C [217°F]
	Outlet water temperature	93°C [199°F]
	Fan power	11 kW
	Fan air flow w/o restriction	8.5m ³ /s [18012cfm]
	Available restriction on air flow	43mm CE [1.7in. WG]
	Type of coolant	Glycol-Ethylene
	Thermostat	82-95 °C
GAS SYSTEM	HC	23 mg/Nm ³
	CO	256 mg/Nm ³
	Nox	1800 mg/Nm ³
	PM	23.7 mg/Nm ³