



ENGINE SPECIFICATIONS

STANDARD FEATURES	Manufacturer / Model	VOLVO TWD1643GE , 4-strokes, Turbo , Air/Water SC 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	596kW [799BHP]
	Frequency regulation, steady state	+/- 0.5%
	BMEP	27.4bar [397psi]
Governor : type	ELEC	
EXHAUST SYSTEM	Exhaust gas flow	1693L/s [3588cfm]
	Exhaust temperature	450°C [842°F]
	Max back pressure	1000mm CE [39in. WG]
FUEL SYSTEM	110% (Stand By power)	142.6L/h [37.7gal/hr]
	100% (of the Prime Power)	128L/h [33.8gal/hr]
	75% (of the Prime Power)	94.5L/h [25.0gal/hr]
	50% (of the Prime Power)	63L/h [16.6gal/hr]
	Max. fuel pump flow	190L/h [50.2gal/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	463kW [26326Btu/mn]
	Radiated heat to ambient	20kW [1137Btu/mn]
	Heat rejection to coolant	218kW [12395Btu/mn]
AIR INTAKE	Max. intake restriction	150mm CE [6in. WG]
	Engine air flow	727L/s [1541cfm]
COOLANT SYSTEM	Radiator & engine capacity	95L [25.099gal]
	Max water temperature	103°C [217°F]
	Outlet water temperature	93°C [199°F]
	Fan power	17 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	0.08 g/KW.h
	CO	0.69 g/KW.h
	Nox	5.4 g/KW.h
	PM	0.083 g/KW.h