

VOLVO

Technical Specifications



ENGINE

- VOLVO series heavy duty diesel engine
- 4 cycle, water cooled, turbocharged & air to air charge cooled /turbocharged & air to water charge cooled
- Direct injection
- Electronic governor system
- 24 volt self-starter and charger alternator
- Changeable air, fuel and oil filter
- Tropical type radiator
- Flexible fuel pipe
- Oil discharge valve and extension pipe
- Industrial type silencer, exhaust spiral or compensator
- Maintenance free battery
- Engine block water heater (in automatic models)
- Diesel gen-set maintenance and operating instructions and electrical circuit diagram

QUALITY STANDARD

Our generators are manufactured in compliance with VDE 0530, BSE 4999 BS5000, IEC 34, TS ISO 8528, TS EN ISO 3744, TS EN ISO 3746, TS EN 60034-1, TS EN 60204-1, TS EN 60335-1, TS EN 61439-1,

EN 61000, TS EN ISO12100 standards.

We have ISO 9001:2008, ISO 14001:2004, OHSAS 18001:2007 and ISO10002:2006 management system certificates from Kiwa & MEYER, an accredited independent quality organization.

Our generators up to 400 kw are manufactured in compliance with 2000/14/EC European noise emission directive and certified from Ente Certificazione Macchine.

We also have TS ISO 8528-4, TS ISO 8528-5, TS EN 13501-1+A1:2013 flame retardancy and TS EN ISO 9227 certificates against anti-corrosion together with CE Declaration.

ALTERNATOR

- Brushless, single bearing, flexible disc 4 poles alternator for harmonic failure
- H type isolation class
- IP 21-23 protection class
- Self exciter
- Electronic automatic voltage regulator
- Stator 2/3 step for harmonic failure
- The alternator windings are protected by insulating varnish against oil and acid.

EXTRA EQUIPMENTS

- Charge ammeter
- Moulded case circuit breaker (in automatic models)
- Hospital/Critical type silencer
- Sound-proof canopy
- Mobile - trailer
- Synchronization control panel for 2-16 gensets
- 3 pole/4 pole automatic transfer panel (A.T.S.)
- Fuel and oil heater
- Alternator heater
- Automatic fuel filling system
- Fuel-water separator filter
- PMG warning system

CANOPY

- Modular type sound-proof canopy
- Canopy installation executed with screw and nut, without welding process
- Epoxy and polyester powder painted canopy
- Canopy designed for easy maintenance
- Lockable doors on both sides of canopy
- Emergency stop button
- Transparent panel inspection window

AUTOMATIC CONTROL PANEL

- LCD display screen
- Hardware and materials needed
- Battery charger
- USB port & RS-485 output

GEN-SET SAFETY PROTECTION & ALARMS

- High water temperature
- Over current load
- Low oil pressure
- High & low genset voltage
- High & low engine speed
- Start/stop failure
- Low radiator water level



Easy maintenance canopy design



Refilling from the outside of the canopy



Canopy made of galvanized steel



Warning system for decreasing fuel with electronic fuel level sender



VOLVO Series

Diesel Generator Sets

VOLVO Series Diesel Generator Sets 501-770 kVA

MODEL				E VL XX 0501	E VL XX 0556	E VL XX 0651	E VL XX 0700	E VL XX 0715	E VL XX 0770
GROUP	GEN-SET POWER	STAND BY	kVA	501	556	651	700	715	770
			kW	400.8	444.8	520.8	560	572	616
		PRIME	kVA	455	505	592	636	650	700
			kW	364	404	473	509	520	560
	CANOPY DIMENSION (W x L x H) mm			N/A	N/A	N/A	N/A	N/A	N/A
	CANOPY WEIGHT kg			N/A	N/A	N/A	N/A	N/A	N/A
	OPEN DIMENSION (W x L x H) mm			N/A	N/A	N/A	N/A	N/A	N/A
	OPEN WEIGHT			N/A	N/A	N/A	N/A	N/A	N/A
ENGINE	BRAND			VOLVO	VOLVO	VOLVO	VOLVO	VOLVO	VOLVO
	TYPE			TAD 1345 GE	TAD 1641 GE	TAD 1642 GE	TWD 1643 GE	TWD1644GE	TWD1645GE
	POWER	STAND BY	kW	431	473	554	596	610	655
		PRIME	kW	388	430	503	536	555	595
	SPEED (rpm)			1500	1500	1500	1500	1500	1500
	CYCLE			4	4	4	4	4	4
	DISPLACEMENT (lt)			12.78	16.12	16.12	16.12	16.12	16.12
	NUMBER OF CYLINDERS			6 IN LINE	6 IN LINE	6 IN LINE	6 IN LINE	6 IN LINE	3 IN LINE
	BORE x STROKE (mm x mm)			131 x 158	144 x 165	144 x 165	144 x 165	144 x 165	77/81
	COMPRESSION RATIO			18.1 : 1	16.5 : 1	16.5 : 1	16.5 : 1	16.8 : 1	16.8 : 1
	GOVERNOR TYPE			ELECTRONIC	ELECTRONIC	ELECTRONIC	ELECTRONIC	ELECTRONIC	ELECTRONIC
	INDUCTION			TURBOCHARGED - AIR TO AIR	TURBOCHARGED - AIR TO AIR	TURBOCHARGED - AIR TO WATER	TURBOCHARGED - AIR TO WATER	TURBOCHARGED - AIR TO WATER	TURBOCHARGED - AIR TO WATER
	COMBUSTION SYSTEM			DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT
	COOLING SYSTEM			WATER	WATER	WATER	WATER	WATER	WATER
	FUEL CONSUMPTION lt / h	%100 PRIME POWER		90.54	101.88	118.58	127	126	147
		%75 PRIME POWER		68.25	75.25	87.59	93.81	94	113
		%50 PRIME POWER		45.97	50.94	58.4	62.54	63	79
TOTAL LUBRICATION SYSTEM CAPACITY (lt)			36	42	48	48	48	48	
TOTAL COOLANT CAPACITY (lt)			46	63	63	95	100	100	
FUEL TANK CAPACITY (lt)			N/A	N/A	N/A	N/A	N/A	N/A	

Emsa reserves the right to make changes in model, technical specifications, color, equipment & accessories without prior notice.