

Volvo 500kVA standby diesel generator



KEY SPECIFICATIONS

STANDBY POWER	500kVA
PRIME POWER	450kVA
PHASE	Three
DRY WEIGHT	5000kg
LENGTH	3900mm
WIDTH	1400mm
HEIGHT	1850mm
FUEL TANK CAPACITY	700l

FEATURES & BENEFITS

- Maximum 500kVA standby power at 230/400v @ 50Hz 1500rpm
- High quality and reliable six-cylinder 12.78l Volvo Penta diesel engine
- Ideal for business applications
- Silent canopy which can stand outside with lockable doors
- Automatic changeover (ATS), maintenance free batteries and trickle charger included

- Four-way protection system included
- H-specification insulation, brushless alternator with AVR provides stable output
- Easy to use digital controller with auto and manual start options
- All sets undergo a comprehensive testing/pre delivery inspection prior to delivery peace of mind of earlier of one year/1000 hour warranty
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STANDARD GENSET SPECIFICATIONS

ENGINE

Volvo heavy-duty diesel engine
Six cylinder equipped with piston cooling
Electronic governor control system
Replaceable wet type cylinder liners
24v DC starter and charge alternator
Replaceable fuel filter, oil filter and dry element air filter
Cooling radiator and fan
Fuel connection hoses and manual sump oil drain valve
Exhaust silencer
Maintenance free battery including rack and cables
Jacket water heater (as option)
Volvo engine manual

ALTERNATOR

Brushless, single bearing system, four poles
Insulation class H with circuit breaker protection
Standard degree of protection IP21
Self-exciting and self-regulating
AVR SX440 included
Screen protected and drip proof
Stator winding with 2/3 pitch for improved harmonics
Close voltage regulation

CHASSIS

Steel chassis and anti-vibration pads
Base frame design incorporates an integral fuel tank
The generator can be lifted or carefully pushed/pulled by the base frame
Includes diesel level sensor information to the controller

CANOPY

Ventilation parts are designed with modular principles
Weather resistant and lined with sound reducing foam
All metal canopy parts are painted by powder paint
Panel window
Lockable doors on each side
Easy maintenance and operation
Easy lifting and moving
Insulated engine exhaust system
Exterior emergency stop push button

*All ratings are quoted at maximum ratings at sea level and de rating will be applicable for altitude and power factor

CONTROL SYSTEM

Control supervision and protection panel is mounted on the genset base frame. The control panel is equipped as follows:

AUTO MAINS FAILURE CONTROL PANEL

Smartgen series automatic transfer switch module
HGM7220 electronic controller
Emergency stop push button
Static battery charger
Four-pole electrically and mechanically interlocked ATS

GENERATING SET CONTROL MODULE HGM7220 FEATURES

This module is used to monitor a mains supply and automatically start a standby generating set
Event logging and shutdown alarms
STOP/RESET-MANUAL-AUTO-TEST-START

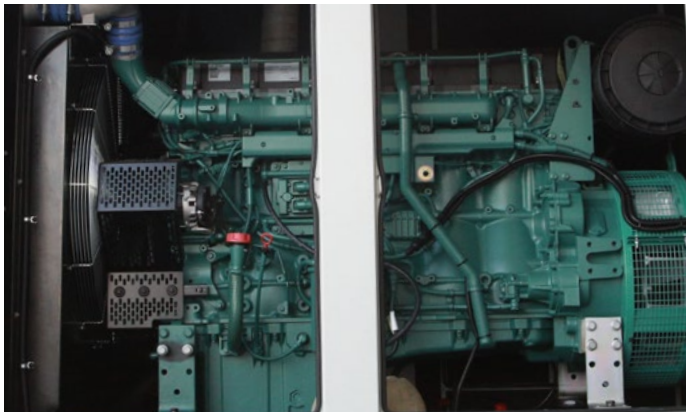
METERING VIA LCD DISPLAY

Generator volts (L-L/L-N); mains volts (L-L/L-N)
Generator amps (L1, L2, L3); generator (kVA and kW)
Generator frequency; generator (cos)
Engine hours run; plant battery (volts)
Engine oil pressure (psi and bar)
Engine speed (rpm)
GSM SMS signal
Engine temperature (°C)

AUTOMATIC SHUTDOWN AND FAULT CONDITIONS

Under/over speed; fail to start
High engine temperature; fail to stop
Low oil pressure; charge fail
Under/over generator volts; over current
Under/over generator frequency; emergency stop
Under/over mains frequency
Under/over mains voltage
Low/high battery volts

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SPECIFICATIONS TABLE

ENGINE SPECIFICATIONS		ALTERNATOR SPECIFICATIONS	
Engine make	Volvo	Standby power output	500kVA
Diesel generator model	TAD1345GE	Prime power output	550kVA
Displacement	12.78l	Insulation class	H
Cylinder bore/Stroke	131mm x 158mm	Type	Brushless
Fuel system	EMS2 governor	Phase and connection	Three phase, four wire
Cylinders	6	AVR	Yes
Cylinder arrangement	Vertical in-line	AVR model	SX440
Engine output power	388kW	Voltage regulation	± 1%
Turbocharged or normally aspirated	Turbocharged and intercooled	Voltage	230/400v
Cycle	Four stroke	Rated frequency	50Hz
Combustion system	Electronic unit injectors	Voltage regulate change	≤ ±10% UN
Compression ratio	18.1:1	Phase change rate	± 1%
Fuel tank capacity	700l	Power factor	0.8
Fuel consumption 100%	90.5 l/h	Protection class	IP21
Fuel consumption 75%	68.3 l/h	Stator	2/3 pitch
Fuel consumption 50%	46 l/h	Rotor	Single bearing
Fuel consumption 25%	25.1 l/h		
Oil type	15W40	GENERAL SPECIFICATIONS	
Oil capacity	30l	Structure type	Silent weather resistant enclosure
Cooling method	Radiator water-cooled	Dimensions	
Coolant capacity (including radiator)	44l	Length x Width x Height	3900mm x 1400mm x 1850mm
Starter	24v DC	Dry weight	5000kg
Governor system	Electronic	ATS unit included	Yes
Engine speed	1500rpm		

We reserve the right to change generator information without prior notice.
Information is double checked to ensure that it is correct, however we will not be held responsible for clerical errors. (E&OE)