

VOLVO 350KVA

350kVA Prime / 385kVA Standby

Comprehensive Specification Sheet
Electrical and Mechanical Data



**VOLVO
PENTA**

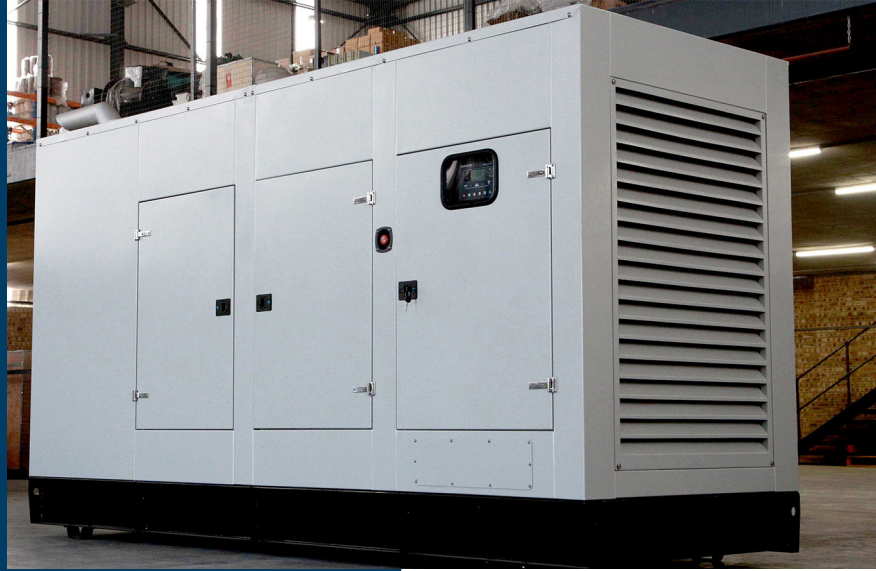
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VOLVO 350KVA

350kVA Prime / 385kVA Standby / Three Phase

FEATURES & BENEFITS

- 385kVA standby power at 230/400v @ 50Hz 1500rpm
- High-quality and reliable six-cylinder 12.78l turbocharged Volvo diesel engine
- Ideal for home and business applications
- Silent canopy which can stand outside with lockable doors
- Automatic changeover (ATS), maintenance free batteries and trickle charger included
- H-specification insulation, brushless alternator with AVR provides stable output
- High-temperature and oil pressure sensor to protect against engine damage
- Easy to use digital controller with auto/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



CANOPY

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

CHASSIS

- The complete generator set is mounted as a whole on a heavy duty fabricated, steel base frame
- 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
- Dial type fuel gauge on the fuel tank

Overview

| | |
|--------------------|--------|
| Standby power | 385kVA |
| Prime power | 350kVA |
| Phase | Three |
| Dry weight | 4000kg |
| Length | 3900mm |
| Width | 1400mm |
| Height | 2150mm |
| Fuel tank capacity | 770l |

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

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

GENERATING SET CONTROL MODULE SMARTGEN HGM7220 FEATURES

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

METERING VIA LCD DISPLAY

- Mains volts (L-L/L-N)
- Generator amps (L1, L2, L3)
- Generator frequency; generator (cos)
- Engine hours run; plant battery (volts)
- Engine oil pressure (psi and bar)

- Engine speed (rpm)
- Engine temperature (degrees 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
- Under/over generator frequency
- Emergency stop/start failure
- Under/over mains voltage
- Charge failure

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TECHNICAL SPECIFICATIONS

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

Engine

| | |
|---------------------------------------|--|
| Engine make | Volvo |
| Engine model | TAD1342GE |
| Displacement | 12.78l |
| Cylinder bore/Stroke | 131mm x 158mm |
| Fuel system | In-line fuel injection pump |
| Governor | Electrical |
| Cylinders | Six cylinders water cooled |
| Engine output power (1500rpm) | 303kW |
| Turbocharged/normally aspirated | Turbocharged |
| Cycle | Four stroke |
| Combustion system | Direct injection |
| Compression ratio | 18.1:1 |
| Fuel tank capacity | 770l |
| Fuel consumption 100% | 68.9 l/h |
| Fuel consumption 75% | 52.5 l/h |
| Fuel consumption 50% | 36.1 l/h |
| Fuel consumption 25% | 20 l/h |
| Oil type | CD-15W-40 |
| Engine oil capacity | 36l |
| Cooling method | Water-cooled radiator/fan |
| Coolant capacity (including radiator) | 44l |
| Starter | 24v DC charge alternator |
| Engine speed | 1500rpm |
| Filters | Replaceable fuel filter/oil filter/dry element air filter |
| Battery | Maintenance-free battery including rack and cables |
| Silencer | Exhaust silencer |

Alternator

| | |
|-------------------------|--|
| Alternator make | StromerPower |
| Standby power output | 385kVA |
| Prime power output | 350kVA |
| Insulation class | Class-H with circuit breaker protection |
| Type | Brushless |
| Phase and connection | Three phase/four wire |
| AVR | Included |
| AVR model | SX460 |
| Voltage regulation | ± 1% |
| Voltage | 230/400v |
| Rated frequency | 50Hz |
| Voltage regulate change | ≤ ±10% UN |
| Phase change rate | ± 1% |
| Power factor | 0.8φ |
| Protection class | IP23 standard/screen protected/drip-proof |
| Stator | 2/3 pitch |
| Rotor | Single bearing |
| Excitation | Self-exciting |
| Regulation | Self-regulating |

General

| | |
|--|---------------------------------------|
| Structure type | Silent weather resistant enclosure |
| Dimensions Length x Width x Height | 3900mm x 1400mm x 2150mm |
| Dry weight | 4000kg |
| ATS unit included | Included |
| Four-way protection system included | Included |