

60Hz POWER RATINGS

| Voltage AC | Phase | PF | Standby | | Prime* | |
|------------|-------|-----|---------|------|--------|------|
| | | | KW | A | Kw | A |
| 120/208 | 3 | 0.8 | 556 | 1928 | 505 | 1754 |
| 120/240 | 3 | 0.8 | 556 | 1671 | 505 | 1520 |
| 277/480 | 3 | 0.8 | 556 | 836 | 506 | 761 |
| 347/600 | 3 | 0.8 | 557 | 670 | 506 | 609 |

* Prime power rating for reference only.

Overview of the SIMMAX series of Industrial Generator Sets

Simson-Maxwell generators are factory-built in facilities that utilize the latest technology, mechanical and electrical component assembly, production, and testing. Each model is the result of computer-aided design and modeling backed up by exhaustive prototype-testing. Our development technology results in a unique range of innovative designs for highly reliable generator sets backed-up by a comprehensive warranty covering all components.

Standard Configuration of Industrial Sets

- Long-life, heavy-duty, 4-cycle, direct injection diesel engine from a world-renowned manufacturer for economy of operation and maximum reliability and durability. Capable of full-rated load acceptance in one step.
- Cooling: Radiator with belt driven pusher fan.
- Filtration: Heavy duty replaceable element air-cleaner.
- Alternator: Single bearing, 4-pole, rotating field, self-excited, self-ventilated, 12-wire re-connectable (6-wire dedicated for 600V), 60Hz brushless alternator with Class H insulation. Automatic voltage regulator (AVR) providing close voltage regulation.
- Arrangement: Open skid with engine and alternator units close coupled together and with seismic anti-vibration isolators mounted between the assembly and a heavy-duty steel base. Lifting lugs are provided as per application.
- Auto Start Control Panel: Digital auto-start microprocessor based control panel with remote start capability.
- Starting System: Electric starter motor, battery cables, battery and belt driven charging alternator.
- CSA certified and meets CSA C282 requirements.



ENGINE SPECIFICATION

| | |
|--------------------------|------------------------------|
| Manufacturer | Volvo |
| Model | TWD1672GE |
| EPA certified | Tier-4F |
| Crank shaft speed: rpm | 1800 |
| Fuel type | Diesel |
| Injection | Direct |
| Aspiration | Turbocharged |
| Number of cylinder | 6 |
| Cylinder arrangement | Inline |
| Displacement: L | 16.12 |
| Bore: mm | 144 |
| Stroke: mm | 165 |
| Engine standby power: kW | 585.0 |
| Engine prime power: kW | 532.0 |
| Cooling | Water cooled |
| Governor | Electronic-EMS2.3 |
| Starting motor voltage | 24V DC |
| Compression ration | 16.8 :1 |
| Air cleaner type | Single stage-Paper Cartridge |

EXHAUST SYSTEM

| | |
|---|-------------------|
| Maximum engine exhaust temperature: °F (°C) | 831.2 (444) |
| Exhaust gas flow: CFM (m3/hr) | 4347.0 (7385.7) |
| Max. permissible back pressure: PSI (kPA) | 1.451 (10) |

COOLING SYSTEM

| | | |
|--|-------------------|-------------------------------|
| Radiator cooling air flow: CFM (m3/hr) | 32207 (54721) | @Max 40°C ambient temperature |
| Max. restriction of cooling air: in.w.g. (kPA) | 0.402 (0.1) | |
| Engine combustion air flow: CFM (m3/hr) | 1703 (2894) | |
| Total intake air requirement: CFM (m3/hr) | 33910 (57613.5) | |
| Total coolant capacity: Litre | 166 | |

HEAT BALANCE

| | |
|---|-------|
| Heat at rejection to coolant: kW | 429.0 |
| Heat at rejection radiation from engine: kW | 26.0 |
| Heat at rejection to engine exhaust: kW | 454.0 |

LUBRICATION SYSTEM

| | |
|--|----------------------|
| Oil pan capacity: Litre | 42.0 |
| Oil pan capacity with filter: Litre | 48.0 |
| Oil cooler | Integrated full flow |
| Recommended lubricating oil grade | VDS-4 |
| Oil consumption at full load: Litre/hr | 0.11 |
| Oil pressure: PSI (kPA) | 58.1 (400) |

SIMMAX



**POWER
GENERATION**

DIESEL PRODUCT LINE

SVW550 T6-T4

120/240/208/480/600 Volts
60 Hz/1800 RPM | Standby/Prime

ENGINE ELECTRICAL SYSTEM

| | |
|------------------------|-----------------|
| Starting motor voltage | 24V DC |
| Battery capacity | 4D, 12V, 1000A |
| Cranking Amps minimum | 300 A at +20 °C |

FUEL SYSTEM

| | |
|--|---------------------------------------|
| Recommended fuel | ASTM D975(2D) |
| Fuel supply line, min. ID: mm | 15.0 |
| Fuel return line min. ID: mm | 15.0 |
| Fuel supply line max. restriction: kpa | 30 |
| Fuel pump type | Engine-driven |
| Fuel filter | Fuel filter 0.010mm Prefilter 0.005mm |

FUEL CONSUMPTION

| | Standby Power | | Prime Power |
|-----------------------------|---------------|---------------------------|-------------|
| 100% Load Standby: Litre/hr | 141.8 | 100% Load Prime: Litre/hr | 128.9 |
| 75% Load Standby: Litre/hr | 108.1 | 75% Load Prime: Litre/hr | 99.4 |
| 50% Load Standby: Litre/hr | 77.0 | 50% Load Prime: Litre/hr | 71.4 |
| 25% Load Standby: Litre/hr | 47.5 | 25% Load Prime: Litre/hr | 44.9 |

ALTERNATOR SPECIFICATION

| | |
|--|---|
| Alternator manufacturer | STAMFORD |
| Alternator model | HCI534 |
| Voltage | 120V - 480V, 600V |
| Alternator type | Four pole, Rotating field |
| Excitation system | Brushless, PMG (MX341) |
| Power factor | 0.8 |
| Number of leads | 12 leads reconnectable (120V-480V-600V) |
| Stator pitch | 2/3 |
| Insulation | Class H |
| Windings - temperature rise / Ambient °C | 125 / 40 |
| Enclosure rating | IP23 |
| Bearing | Single, Sealed |
| Amortisseur windings | Full |
| Voltage regulation - no load to full load with DSR AVR | ± 1% |
| TIF | <50 |
| Line harmonics | 5% MAXIMUM |
| Alternator cooling air flow: CFM (m3/hr) | 2780 (4724) |

STANDARD FEATURES

| | |
|---|---|
| • Radiator with pusher fan | • Standard fuel filter |
| • Medium-duty, Single stage-Paper Cartridge | • All rotating components protected with metal guards |
| • Heavy-duty engine start batteries with cables | • Operation and installation literature |
| • Emergency stop switch | • CSA certified |
| • Control Panel (See next page for details) | • Steel base for mounting on fuel tank/concrete surface |

OPTIONAL FEATURE: SUB-BASE FUEL TANK *

| Runtime | 24 hour | 48 hour | 72 hour |
|-----------------------------|-----------------|---------------|------------------|
| Tank volume - US gal (L) | 899.1 (3403.5) | 1798.2 (6807) | 2697.3 (10210.5) |
| Tank size: L x W x H - inch | 139 x 56 x 31 | 195 x 56 x 40 | 197 x 84 x 40 |
| Tank size: L x W x H - m | 3.6 x 1.4 x 0.8 | 5 x 1.4 x 1 | 5 x 2.2 x 1 |

* All measurements are approximate and for estimation purposes only. The tank dimensions may vary. For specific sizes, contact sales representative.

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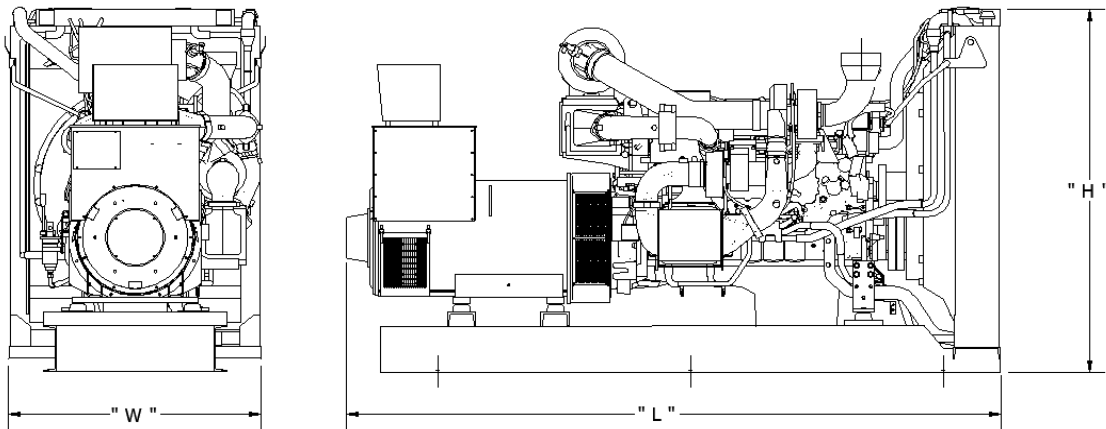
Control Systems Standard Features - Generator Digital Control Panel

Standard Configuration of Control Systems

- Numerous control systems available, depending on customer requirements
- Automatic or manual start/stop
- Pre-lube function with timers
- Adjustable crank attempts
- Engine warm up/cooling functions
- Digital metering with alarms and shutdowns
- LCD display
- LED indicators
- In-built PLC function
- RS232 (optional RS485 or CAN) communication
- Data logging up to 350 events
- Password protection



Key dimensions and Weights



GENERATOR DATA *

| L = LENGTH - inch (mm) | W = WIDTH - inch (mm) | H = HEIGHT - inch (mm) | DRY WEIGHT - lbs (kg) |
|------------------------|-----------------------|------------------------|-----------------------|
| 138 (3505.2) | 55 (1397) | 79.0 (2006.6) | 9233.2 (4187.4) |

* All measurements are approximate and for estimation purposes only. Images are reference only.
Any deviation can change dimensions.
Materials and specifications subject to change without notice.



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