

### 60Hz POWER RATINGS

Voltage AC	Phase	PF	Standby		Prime*	
			KW	A	Kw	A
120/240	1	1	127	531	121	502
120/208	3	0.8	129	449	123	425
277/480	3	0.8	130	196	123	185
347/600	3	0.8	130	157	123	148

\* 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	Deutz
Model	TCD2013L062VC
EPA certified	Tier-4I
Crank shaft speed: rpm	1800
Fuel type	Diesel
Injection	Direct
Aspiration	Turbocharged
Number of cylinder	6
Cylinder arrangement	Inline
Displacement: L	7.1
Bore: mm	108
Stroke: mm	130
Engine standby power: kW	140.4
Engine prime power: kW	132.9
Cooling	Water cooled
Governor	Electronic-EMR4
Starting motor voltage	12V DC
Compression ration	18.0:1
Air cleaner type	Dry type with paper element

#### EXHAUST SYSTEM

Maximum engine exhaust temperature: °F (°C)	860 ( 460 )
Exhaust gas flow: CFM (m3/hr)	1074.0 ( 1824.8 )
Max. permissible back pressure: PSI (kPA)	0.436 ( 3 )

#### COOLING SYSTEM

Radiator cooling air flow: CFM (m3/hr)	7840 ( 13321 )	@Max 40°C ambient temperature
Max. restriction of cooling air: in.w.g. (kPA)	1.005 ( 0.3 )	
Engine combustion air flow: CFM (m3/hr)	371 ( 631 )	
Total intake air requirement: CFM (m3/hr)	8211 ( 13950.6 )	
Total coolant capacity: Litre	34	

#### HEAT BALANCE

Heat at rejection to coolant: kW	97.0
Heat at rejection radiation from engine: kW	14.0
Heat at rejection to engine exhaust: kW	TBA

#### LUBRICATION SYSTEM

Oil pan capacity: Litre	20.0
Oil pan capacity with filter: Litre	22.0
Oil cooler	Integrated oil cooler
Recommended lubricating oil grade	TR0199-99-1217
Oil consumption at full load: Litre/hr	0.044
Oil pressure: PSI (kPA)	29.1 ( 200 )

# SIMMAX



**POWER  
GENERATION**

## DIESEL PRODUCT LINE

**SDW115 T6-T4**

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

### ENGINE ELECTRICAL SYSTEM

Starting motor voltage	12V DC
Battery capacity	4D, 12V, 1000A
Cranking Amps minimum	110AH A at -5°C

### FUEL SYSTEM

Recommended fuel	ASTM D 975 1-D/2-D
Fuel supply line, min. ID: mm	15.0
Fuel return line min. ID: mm	15.0
Fuel supply line max. restriction: kpa	16.67
Fuel pump type	Engine-driven
Fuel filter	Single stage Oil and Fuel Filter with Pre Filter

### FUEL CONSUMPTION

	Standby Power		Prime Power
100% Load Standby: Litre/hr	43.7	100% Load Prime: Litre/hr	39.7
75% Load Standby: Litre/hr	37.1	75% Load Prime: Litre/hr	33.7
50% Load Standby: Litre/hr	26.0	50% Load Prime: Litre/hr	23.6
25% Load Standby: Litre/hr	14.9	25% Load Prime: Litre/hr	13.5

### ALTERNATOR SPECIFICATION

Alternator manufacturer	STAMFORD
Alternator model	UCI274
Voltage	120V - 480V, 600V
Alternator type	Four pole, Rotating field
Excitation system	Brushless, Self excited (PMG option available)
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)	1308 ( 2223 )

### STANDARD FEATURES

• Radiator with pusher fan	• Standard fuel filter
• Medium-duty, Dry type with paper element	• 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)	276.9 (1048.1)	553.8 (2096.2)	830.7 (3144.3)
Tank size: L x W x H - inch	103 x 36 x 21	103 x 36 x 38	143 x 36 x 40
Tank size: L x W x H - m	2.6 x 0.9 x 0.6	2.6 x 0.9 x 1	3.7 x 0.9 x 1

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

Rev: A

Date: 3/29/2018

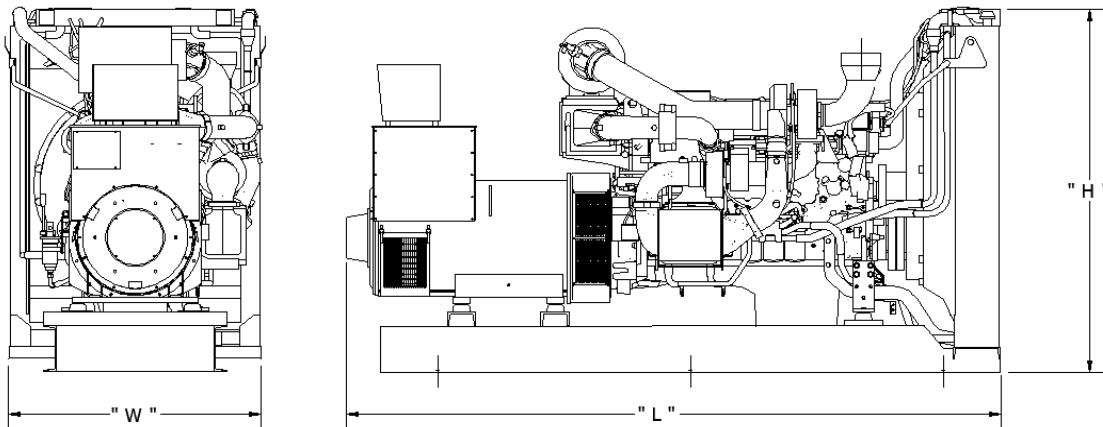
## Control Systems Standard Features - Generator Digital Control Panel

### 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)
102 ( 2590.8 )	35 ( 889 )	57.0 ( 1447.8 )	3461.3 ( 1569.8 )

\* 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.



Simson Maxwell

Calgary | Edmonton | Nanaimo | Port Coquitlam | Prince George | Terrace | Ft. St. John

www.simson-maxwell.com | 800-374-6766

