

Diesel Generator Set

S1000

1000 kW / 1250 kVA

Standby Power @ 60Hz

909 kW / 1136 kVA

Prime Power @ 60Hz

STANDARD FEATURES

- Diesel engine, EPA and CARB certified, electric starter, battery charging alternator 24V, electronic governor
- Single bearing alternator IP 21, Class H insulation
- Standard ambient radiator – 40° C
- Integral vibration isolation
- Dry type air filter
- Main line circuit breaker
- 24V battery, rack and cable
- User manual
- CSA Certified



- Ingersoll-Rand provides a full line of products with high quality recognized engines and alternators.
- All generator sets are factory tested. All generator set models are prototype tested.
- A one-year/1000-hour limited warranty included. Extended warranty option available.
- Service and parts are available from Ingersoll-Rand distributors.

GENERATOR RATINGS

Voltage	Hz	Phase	P.F	Standby Amps	Standby Ratings kW/kVA	Prime Ratings kW/kVA
277/480	60	3	0.8	1504	1000 / 1250	909 / 1136
254/440	60	3	0.8	1553	947 / 1184	902 / 1128

Standby ratings are available for the duration of any power outage. No overload capacity is specified at these ratings. Prime ratings are available per BS 5514, DIN 6271, ISO-3046 and IEC 34-1 with 10% overload capacity one hour in twelve hours.

Ratings are per standard environmental conditions. Please consult factory for deration.



S1000 APPLICATION DATA

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ENGINE DATA

Manufacturer	MTU
Model	16V2000G82, 4-cycle, Turbocharged, Air/Air
Cylinder arrangement	16 Vee
Displacement	1946.7 in ³ (31.9 L)
Bore and stroke	5.1 in (130 mm)X 5.9 in (150 mm)
Compression ratio	14:1
Rated rpm	1,800
Piston speed	29.5 ft/s (9 m/s)
Max stand by power at rated rpm	1,494.1 bhp (1,115 kW)
Frequency regulation, no load to full load	NA
Speed regulation, steady state	+/- 0.5%
BMEP	281.1 psi (19.4 bar)
Governor type	Electronic

OPERATING DATA

EXHAUST SYSTEM

Exhaust gas flow	Exhaust temperature	Max back pressure
6,907 cfm (3260 L/s)	959 °F (515°C)	1.47 in Hg (4.98 kPa)

FUEL CONSUMPTION – STANDBY RATING

100% (Load)	75% (Load)	50% (Load)	25% (Load)
57.2 gal/hr (216.5 L/h)	43.1 gal/hr (163 L/h)	30.2 gal/hr (114.3 L/h)	NA gal/hr (NA L/h)

LUBRICATION SYSTEM

Total oil capacity w/filters	Oil pressure low idle	Oil pressure rated RPM	Oil consumption 100% load
29.1 gal (110 L)	72.5 psi (5 bar)	86.9 psi (6 bar)	0.3 gal/hr (1.08 L/h)

AIR INTAKE

Max intake restriction	Engine air flow
6 in H ₂ O (1.49 kPa)	6907 cfm (3260 L/s)

COOLING SYSTEM

Radiator & engine capacity max	Water temperature	Outlet water temperature	Fan power	Fan air flow	Engine heat rejection
58 gal (220 L)	206.6 °F (97 °C)	199.4 °F (93 °C)	41kW	46,196.1 cfm (21.8 m ³ /s)	20,753.9 btu/mn (365 kW)



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ALTERNATOR DATA

Manufacturer	LEROY SOMER
Type	LSA50.1S4
Poles	4
Exciter type	AREP
Insulation — class/temperature rise	H / 150°C/40°C (Standby)
Voltage regulator	R449
Bearing	1
Coupling	Direct
Voltage regulation 0 to 100% load	+/-1.5%
Recovery time (20% Volt dip) ms	<500
Peak motor starting kVA@480V	2,300 (30% voltage dip)

- Compliance with NEMA (IEC 34.1/34.2 MG1.22, UTE: NFC 51.111,VDE 0530 BS 4999 & 5000, CSA, ISO 8528.3)
- 2/3 pitch, 6 lead
- Vacuum-impregnated windings with epoxy varnish. IP21 drip proof
- Generator allows as standard sustained short circuit current of up to 300% of rated current for up to 10 seconds

CONTROL PANEL

Intellisys™ Standard features

- Powerful & flexible Microprocessor-based digital control panel for easy genset operation
- 8-line 21-character backlit LCD screen for convenient operator access
- Quick access to all generator and engine measurements and status
- User-friendly and non-volatile alarm & fault history with date-time stamp
- Built-in generator and engine protection parameters
- Field-proven and well-documented control panel components
- Supports engine pre-glow, battery charger, coolant heater, auto-start options.
- Capable of local or remote monitoring & control of genset via dedicated RS485 port.

Intellisys™ digital control panel is available on all models. Compatible with 12 or 24 Volt engine electrical system.



Options

- Software for remote management
- NFPA 110, Level 1 Control Panel



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OPTIONS

Engine and Radiator

- Heat shield protection
- Oil drain extension
- Heavy duty air filter
- Lube oil drain pump
- Radiator core guard
- Battery charger, equalize/float type
- Block heater

Enclosed Unit

- Sound attenuated enclosure (79dba @ 23 Ft-full load)

Alternator

- Anti-condensation heater
- Enforced impregnation
- Oversized alternator

Exhaust

- Industrial silencer exhaust kit
- Residential silencer exhaust kit
- Critical silencer exhaust kit

Fuel

- Day tank
- Sub base fuel tanks UL-142
- Fuel/water separator filter

Control panel

- NFPA II0, level 1 control panel
- Remote annunciator

Literature

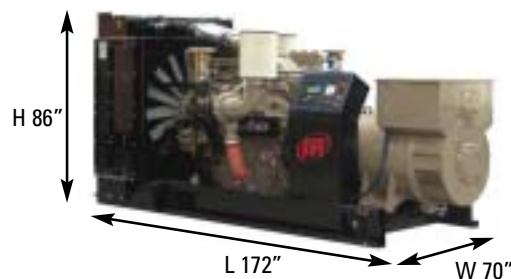
- Parts manual
- Maintenance manual
- Operation manual

Service & Extended Warranty

- Trained service personnel providing IR parts, service and maintenance packages
- Extended Warranty

WEIGHT AND MEASUREMENTS

Open model	S1000
Weight	13,773 lb Net 14,478 lb Gross (6,250 Kg Net 6,570 Kg Gross)
Overall size — l x w x h	172" x 70" x 86" (4,370 mm x 1,770 mm x 2,190 mm)



Sound attenuated	Silencer mounted inside
Weight	22,193 lb Net 23,835 lb Gross (10,071 Kg Net 10,816 Kg Gross)
Overall size — l x w x h	239" x 96" x 102" (6,058 mm x 2,438 mm x 2,591 mm)



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