

**Diesel Generator Set**

# S1250

1250 kW / 1563 kVA

Standby Power @ 60Hz

1137 kW / 1421 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	1880	1250 / 1563	1,137 / 1,421
254/440	60	3	0.8	2008	1224 / 1530	1,137 / 1,421

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.



# S1250 APPLICATION DATA

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## ENGINE DATA

<b>Manufacturer</b>	MTU
<b>Model</b>	12V4000G40, 4-cycle, Turbocharged, Air/Water
<b>Cylinder arrangement</b>	12 Vee
<b>Displacement</b>	2974.9 in <sup>3</sup> (48.75 L)
<b>Bore and stroke</b>	6.5 in. (165 mm) X 7.5 in. (190 mm)
<b>Compression ratio</b>	16.6:1
<b>Rated rpm</b>	1,800
<b>Piston speed</b>	37.4 ft/s (11.4 m/s)
<b>Max stand by power at rated rpm</b>	1996.6 bhp (1,490 kW)
<b>Frequency regulation, no load to full load</b>	NA
<b>Speed regulation, steady state</b>	+/- 0.5%
<b>BMEP</b>	268.1 psi (18.5 bar)
<b>Governor type</b>	Electronic

## OPERATING DATA

### EXHAUST SYSTEM

<b>Exhaust gas flow</b>	<b>Exhaust temperature</b>	<b>Max back pressure</b>
10,594 cfm (5000 L/s)	725 °F (385°C)	0.88 in Hg (2.99 kPa)

### FUEL CONSUMPTION – STANDBY RATING

<b>100% (Load)</b>	<b>75% (Load)</b>	<b>50% (Load)</b>	<b>25% (Load)</b>
88.2 gal/hr (334 L/h)	66.6 gal/hr (252 L/h)	46.0 gal/hr (174 L/h)	NA gal/hr (NA L/h)

### LUBRICATION SYSTEM

<b>Total oil capacity w/filters</b>	<b>Oil pressure low idle</b>	<b>Oil pressure rated RPM</b>	<b>Oil consumption 100% load</b>
68.7 gal (260 L)	43.5 psi (3 bar)	79.7 psi (5.5 bar)	0.5 gal/hr (1.8 L/h)

### AIR INTAKE

<b>Max intake restriction</b>	<b>Engine air flow</b>
6 in H <sub>2</sub> O (1.49 kPa)	10,594 cfm (5,000L/s)

### COOLING SYSTEM

<b>Radiator &amp; engine capacity max.</b>	<b>Water temperature</b>	<b>Outlet water temperature</b>	<b>Fan power</b>	<b>Fan air flow</b>
NA	206.6 °F (97 °C)	199.4 °F (93 °C)	NA	55,943.9 cfm (26.4 m <sup>3</sup> /s)



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## ALTERNATOR DATA

<b>Manufacturer</b>	LEROY SOMER
<b>Type</b>	LSA50.1M7
<b>Poles</b>	4
<b>Exciter type</b>	AREP
<b>Insulation — class/temperature rise</b>	H / 150°C/40°C (Standby)
<b>Voltage regulator</b>	R449
<b>Bearing</b>	1
<b>Coupling</b>	Direct
<b>Voltage regulation 0 to 100% load</b>	+/-1.5%
<b>Recovery time (20% Volt dip) ms</b>	<500
<b>Peak motor starting kVA@480V</b>	3,500 (35% 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 (80dba @ 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

<b>Open model</b>	S1250
<b>Weight</b>	19,227 lb Net 20,186 lb Gross (8,725 Kg Net 9,160 Kg Gross)
<b>Overall size — l x w x h</b>	148" x 72" x 87" (3,770 mm x 1,835 mm x 2,210 mm)



<b>Sound attenuated</b>	Silencer mounted inside
<b>Weight</b>	51,060 lb Net 59,346 lb Gross (23,170 Kg Net 26,930 Kg Gross)
<b>Overall size — l x w x h</b>	480" x 96" x 102" (12,192 mm x 2,438 mm x 2,591mm)



**Distributed by:**



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