

Diesel Generator Set

S750

750 kW / 938 kVA

Standby Power @ 60Hz

625 kW / 782 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
- Silencer
- 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 | 1128 | 750 / 938 | 625 / 782 |
| 254/440 | 60 | 3 | 0.8 | 1230 | 750 / 938 | 625 / 782 |
| 127/220 | 60 | 3 | 0.8 | 2460 | 750 / 938 | 625 / 782 |
| 120/208 | 60 | 3 | 0.8 | 2602 | 750 / 938 | 625 / 782 |

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.



S750 APPLICATION DATA

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ENGINE DATA

| | |
|---|--|
| Manufacturer | MTU |
| Model | 12V2000G82, 4-cycle, Turbocharged, Air/Air |
| Cylinder arrangement | 12 Vee |
| Displacement | 1,458.5 in ³ (23.9 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 | 1,118.9 bhp (835 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 |
| 5212 cfm (2460 L/s) | 932 °F (500°C) | 1.47 in Hg (4.98 kPa) |

FUEL CONSUMPTION – STANDBY RATING

| | | | |
|-----------------------|-----------------------|----------------------|--------------------|
| 100% (Load) | 75% (Load) | 50% (Load) | 25% (Load) |
| 43.6 gal/hr (165 L/h) | 32.2 gal/hr (122 L/h) | 22.7 gal/hr (86 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 |
| 21.7 gal (82 L) | 72.5 psi (5 bar) | 86.9 psi (6 bar) | 0.2 gal/hr (0.83 L/h) |

AIR INTAKE

| | |
|----------------------------------|------------------------|
| Max intake restriction | Engine air flow |
| 6 in H ₂ O (1.49 kPa) | 5212 cfm (2460 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) | 29 kW | 33,693.5 cfm (15.9 m ³ /s) | 16,489.4 btu/mn (290 kW) |



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ALTERNATOR DATA

| | |
|--|--------------------------|
| Manufacturer | LEROY SOMER |
| Type | LSA491L9A |
| Poles | 4 |
| Exciter type | AREP |
| Insulation — class/temperature rise | H / 150°C/40°C (Standby) |
| Voltage regulator | R448 |
| Bearing | 1 |
| Coupling | Direct |
| Voltage regulation 0 to 100% load | +/-1.5% |
| Recovery time (20% Volt dip) ms | <1000 |
| Peak motor starting kVA@480V | 2500 (28% 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

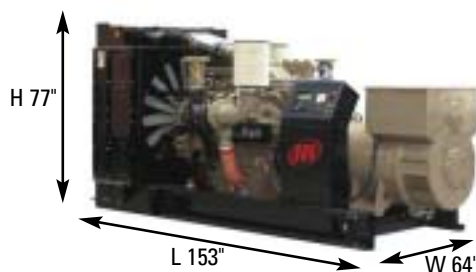
- Parts manual
- Maintenance manual
- Operation manual

Service & Extended Warranty

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

WEIGHT AND MEASUREMENTS

| | |
|---------------------------------|---|
| Open model | S750 |
| Weight | 11,900 lb Net 12,473 lb Gross (5,400 Kg Net 5,660 Kg Gross) |
| Overall size — l x w x h | 153" x 64" x 77" (3,890 mm x 1,630 mm x 1,950 mm) |



| | |
|---------------------------------|---|
| Sound attenuated | Silencer mounted inside |
| Weight | 19,820 lb Net 21,462 lb Gross (8,994 Kg Net 9,739 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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