



# DCA125SSIU4F

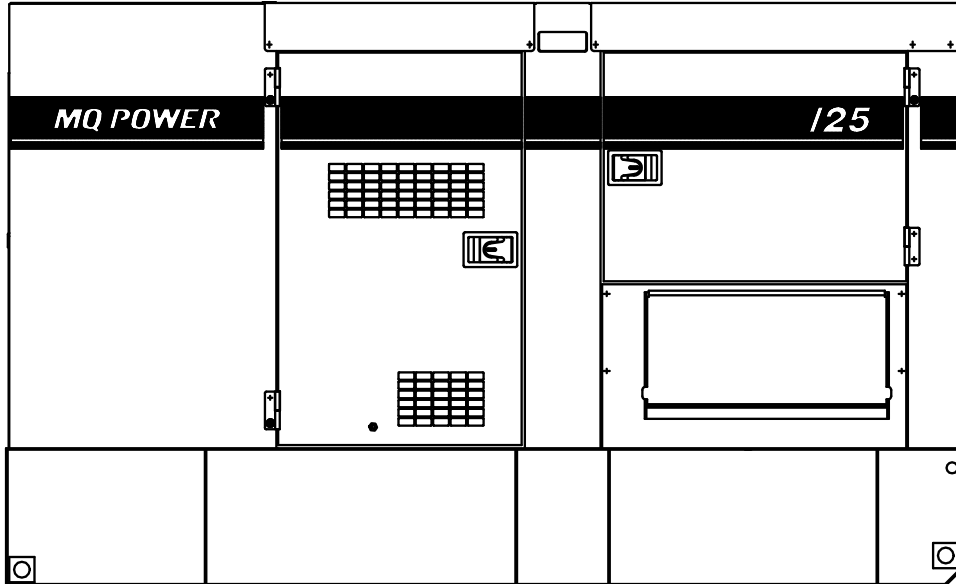
## MQ POWER Series Generator

### WhisperWatt™

Prime Rating — 100kW (125kVA)

Standby Rating — 110kW (137.5kVA)

3-Phase, 60 Hertz, 0.8 PF



### STANDARD FEATURES

- Heavy duty, 4-cycle, direct injection, turbocharged, charge air cooled diesel engine provides maximum reliability.
- Brushless alternator reduces service and maintenance requirements and meets temperature rise standards for Class F insulation systems.
  - Open delta alternator design provides virtually unlimited excitation for maximum motor starting capability.
  - Automatic voltage regulator (AVR) provides precise regulation.
- Electronic governor system maintains frequency to  $\pm 0.25\%$ .
- Full load acceptance of standby nameplate rating in one step (NFPA 110, para 5.6.3.1.2).
- Sound attenuated, weather resistant, steel housing provides operation at 66 dB(A) at 23 feet. Fully lockable enclosure allows safe unattended operation.
- Internal fuel tank with direct reading fuel gauge.
- E-coat and powder coat paint provides durability and weather protection.
- Digital engine gauges including oil pressure, water temperature, battery volts, engine speed, and fuel level.
- Analog generator instrumentation including AC ammeter, AC voltmeter, frequency meter, ammeter phase selector switch, voltmeter phase selector switch, and voltage regulator adjustment potentiometer.
- ECU835 microprocessor-based digital generator controller.
  - Remote 2-wire start/stop control.
  - Operational temperature range of  $-40^{\circ}$  to  $85^{\circ}$  C.
  - High visibility LCD display with heated screen and alphanumeric readout.
  - Modbus interface for gauge panel and expansion options.
- Automatic safety shutdown system monitors the water temperature, engine oil pressure, overspeed and overcrank. Warning lights indicate abnormal conditions.
- Fully covered power panel. Three-phase terminals and single phase receptacles allow fast and convenient hookup for most applications including temporary power boxes, tools and lighting equipment. All are NEMA standard.
- Fuel/water separator. Removes condensation from fuel for extended engine life.
- Simultaneous single and three phase power.
- EPA emissions certified - Tier 4 Final emissions compliant.
  - Engine fitted with DOC and SCR.
- Spill Containment - Bunded design protects environment by capturing up to 128% of engine fluids.



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### SPECIFICATIONS

Generator Specifications		
Design	Revolving field, self-ventilated Drip-proof, single bearing	
Armature Connection	Star with Neutral	Zig Zag
Phase	3	Single
Standby Output	110KW (137.5 KVA)	79 KW
Prime Output	100 KW (125 KVA)	72 KW
3Ø Voltage (L-L/L-N) Voltage Change-Over Bd. at 3Ø 240/139	208Y/120, 220Y/127, 240Y/139	N/A
3Ø Voltage (L-L/L-N) Voltage Change-Over Bd. at 3Ø 480/277	416Y/240, 440Y/254, 480Y/277	N/A
1Ø Voltage (L-L/L-N) (Voltage Change-Over Bd. at 1Ø 240/120)	N/A	240/120
Power Factor	0.8	1.0
Voltage Regulation (No load to full load)	±0.5%	
Generator RPM	1800	
Frequency	60 Hz	
No. of Poles	4	
Excitation	Brushless with AVR	
Frequency Regulation: No Load to Full Load	Isochronous under varying loads from no load to 100% rated load	
Frequency Regulation: Steady State	±0.25% of mean value for constant loads from no load to full load.	
Insulation	Class F	
Sound Level dB(A) Full load at 23 feet	66	

Engine Specifications	
Make / Model	Isuzu / BR-4HK1X
Emissions	EPA Tier 4 Final Certified
Starting System	Electric
Design	4-cycle, water cooled, direct injection, turbocharged. Charged Air Cooled EGR, DOC and SCR.
Displacement	317 in <sup>3</sup> (5193 cc)
No. cylinders	4
Bore x Stroke	4.52 x 4.92 in. (115 x 125 mm)
Gross Engine Power Output	152 hp (113 kW)
BMEP	211 psi (1458 kPa)
Piston Speed	1476 ft/min (7.5 m/s)
Compression Ratio	16.5:1
Engine Speed	1800 rpm
Overspeed Limit	2070 rpm
Oil Capacity	6.05 gallons (22.9 liters)
Battery	12V 150Ah x 1

Fuel System		
Recommended Fuel	ASTM-D975-No.1 & No.2-D*	
Maximum Fuel Flow (per hour)	19 gallons (71.9 liters)	
Maximum Inlet Restriction (Hg)	2.9 in (73.6 mm)	
Fuel Tank Capacity	169 gallons (640 liters)	
<b>Fuel Consumption</b>	<b>gph</b>	<b>lph</b>
At full load	7.11	26.9
At 3/4 load	5.6	21.2
At 1/2 load	4.1	15.5
At 1/4 load	2.6	10.0
DEF Tank Capacity	7.4 gallons (28 liters)	

\* - Use ultra-low sulfur diesel fuel.

Cooling System	
Fan Load	6.57 hp (4.9 kW)
Coolant Capacity (with radiator)	10.3 gallons (39 liters)
Coolant Flow Rate (per minute)	60.8 gallons (230 liters)
Heat Rejection to Coolant (per minute)	4456 Btu (4.7 MJ)
Maximum Coolant Friction Head	1.1 psi (7.7 kPa)
Maximum Coolant Static Head	3.3 feet (1 meter)
Ambient Temperature Rating	104°F (40°C)

Air	
Combustion Air	244 cfm (6.9 m <sup>3</sup> /min)
Maximum Air Cleaner Restriction	25 in. H <sub>2</sub> O (6.25 kPa)
Alternator Cooling Air	1352 cfm (38.3 m <sup>3</sup> /min)
Radiator Cooling Air	6005 cfm (170 m <sup>3</sup> /min)

Exhaust System	
Gas Flow (full load)	512 cfm (14.5 m <sup>3</sup> /min)
Gas Temperature	658°F (348°C)
Maximum Back Pressure	100 in. H <sub>2</sub> O (25 kPa)

Amperage	
Rated Voltage	Maximum Amps
1Ø 120 Volt	277.8 Amps (4 wire) 300A x 2 (Zigzag)
1Ø 240 Volt	138.9 Amps (4 wire) 300A (Zigzag)
3Ø 240 Volt	300 Amps
3Ø 480 Volt	150 Amps
Main Line Circuit Breaker Rating	300 Amps
Over Current Relay Trip Set Point 480V Mode Only	152 Amps

### WARRANTY\*

#### Isuzu Engine\*\*

12 months from date of purchase with unlimited hours or 60 months from date of purchase with 5000 hours (whichever comes first).

#### Generator

24 months from date of purchase or 2000 hours (whichever occurs first).

#### Trailer

12 months excluding normal wear items.

\*Refer to the express written, one-year limited warranty sheet for additional information.

\*\*Refer to Isuzu Diesel Engine Limited Warranty for details.

### NOTICE

Generator is not intended for use in enclosed areas or where free flow of air is restricted.

Backfeed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device.

Specifications are subject to change without notice.



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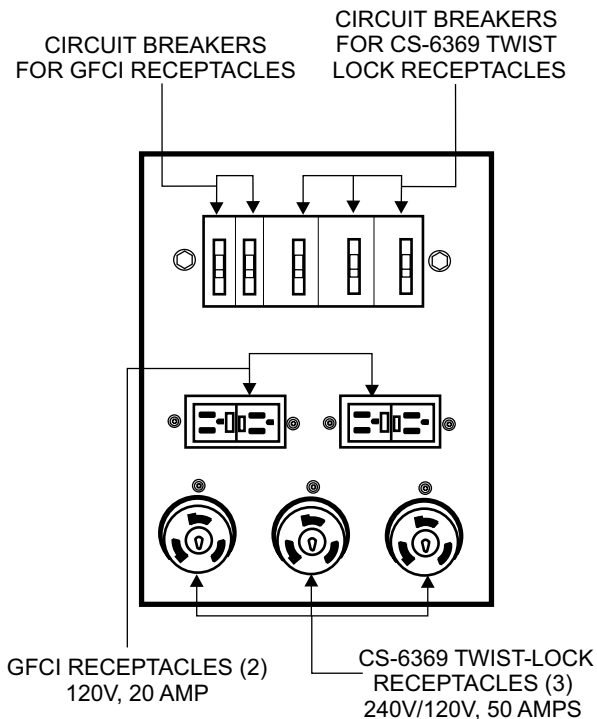
### MQ POWER DECIBEL LEVELS

Our soundproof housing allows substantially lower operating noise levels than competitive designs. WhisperWatts are at home on construction sites, in residential neighborhoods, and at hospitals — just about anywhere.

- 90 — Subway / truck traffic
- 80 — Average city traffic
- 70 — Inside car at 60 mph
- 60 — Air conditioner at 20 feet
- 50 — Normal conversation



### GENERATOR OUTPUT PANEL



### OPTIONAL GENERATOR FEATURES

- **Battery Charger** — provides fully automatic and self-adjusting charging to the generator's battery system.
- **Jacket Water Heater** — for easy starting in cold weather climates below 0° (1500 watts).
- **Special Batteries** — long life batteries provide extra engine cranking power.
- **Spring Isolators** — provides extra vibration protection for standby applications.
- **Trailer Mounted Package** — meets National Highway Traffic Safety Administration (NHTSA) regulations. Trailer is equipped with electronic or surge brakes with double axle configuration.

### OPTIONAL CONTROL FEATURES

- **Audible Alarm** — alerts operator of abnormal conditions.
- **Emergency Stop Switch** — when manually activated, shuts down generator in the event of an emergency.

### OPTIONAL OUTPUT CONNECTIONS

- **Cam-Lok Connectors** — provides quick disconnect alternative to bolt-on connectors.
- **Pin and Sleeve Connectors** — provides industry standard connectors for all voltage requirements.
- **Output Cable** — available in any custom length and size configuration.

