



# DCA220SSJU

## MQ POWER Series Generator

### WhisperWatt™ 220

Prime Rating — 176 kW (220 kVA)

Standby Rating — 194 kW (242 kVA)

60 Hertz



#### STANDARD FEATURES

- Heavy duty, 4-cycle, direct injection, air to air intercooled diesel engine provides maximum reliability.
- Brushless alternator reduces service and maintenance requirements and meets temperature rise standards for Class F insulation systems.
- Open delta excitation design provides virtually unlimited excitation for maximum motor starting capability.
- Automatic voltage regulator (AVR) provides precise regulation.
- Electronic Governor Control — maintains frequency to within  $\pm 0.25\%$  from no load to full load.
- Full load acceptance of standby nameplate rating in one step (NFPA 110, para 5-13.2.6).
- Sound attenuated, weather resistant, steel housing provides operation at 73 dB(A) at 23 feet. Fully lockable enclosure allows safe unattended operation.
- Internal fuel tank with direct reading of fuel gauge.
- E-coat primer with polyurethane enamel finish coat.
- Emergency stop switch when manually activated shuts down generator in the event of an emergency.
- Fuel/water separator removes condensation from fuel for extended engine life. Panel mounted alarm light included.
- Complete engine analog instrumentation includes DC ammeter, oil pressure gauge, water temp. gauge, fuel level gauge, tachometer/hour meter, preheat indicator, and emergency shutdown monitors.
- Complete generator analog instrumentation includes voltage regulator control, ammeter phase selector switch, voltmeter phase selector switch, AC voltmeter, AC ammeter, frequency meter, panel light, and circuit breaker.
- Automatic safety shutdown system monitors the engine oil pressure and coolant temperature. Warning lights indicate abnormal conditions.
- Low coolant level shutdown system provides protection from critically low coolant levels. Includes control panel warning light.
- Automatic start/stop control — automatically starts the generator set during a commercial power failure when used in conjunction with a transfer switch.
- Complete power panel. Fully covered; three-phase terminals and single phase receptacles allow fast and convenient hookup for most applications including temporary power boxes, tools and lighting equipment. The GFCI receptacles are NEMA 5-20, and the auxiliary outputs use CS6369 twist-lock receptacles.
- EPA emissions certified - Tier 3 emissions compliant.



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### SPECIFICATIONS

| Generator Specifications                                      |                                                                       |
|---------------------------------------------------------------|-----------------------------------------------------------------------|
| Design                                                        | Revolving field, self-ventilated<br>Drip-proof, single bearing        |
| Armature Connection                                           | Star with Neutral                                                     |
| Phase                                                         | 3                                                                     |
| Standby Output                                                | 194 KW (242 KVA)                                                      |
| Prime Output                                                  | 176 KW (220 KVA)                                                      |
| 3Ø Voltage (L-L/L-N)<br>Voltage Change-Over Board 240 Config. | 208Y/120, 220Y/127, 240Y/139                                          |
| 3Ø Voltage (L-L/L-N)<br>Voltage Change-Over Board 480 Config. | 416Y/240, 440Y/254, 480Y/277                                          |
| Power Factor                                                  | 0.8                                                                   |
| Voltage Regulation (No load to full load)                     | ±0.5%                                                                 |
| Generator RPM                                                 | 1800                                                                  |
| Frequency                                                     | 60 Hz                                                                 |
| No. of Poles                                                  | 4                                                                     |
| Excitation                                                    | Brushless with AVR                                                    |
| Frequency                                                     | 60 Hz                                                                 |
| Frequency Regulation:<br>No Load to Full Load                 | Isochronous under varying loads<br>from no load to 100% rated load    |
| Frequency Regulation: Steady State                            | ±0.25% of mean value for constant<br>loads from no load to full load. |
| Insulation                                                    | Class F                                                               |
| Sound Level dB(A) Full load at 23 feet                        | 73                                                                    |

| Engine Specifications     |                                                                                 |
|---------------------------|---------------------------------------------------------------------------------|
| Make / Model              | John Deere / 6068HF485                                                          |
| Emissions                 | EPA Tier 3 Certified                                                            |
| Starting System           | Electric                                                                        |
| Design                    | 4-cycle, water cooled, direct injection,<br>turbocharged air to air intercooled |
| Displacement              | 415 in <sup>3</sup> (6.8 liters)                                                |
| No. cylinders             | 6                                                                               |
| Bore x Stroke (mm)        | 106 x 127                                                                       |
| Gross Engine Power Output | 315 bhp (235 kW)                                                                |
| BMEP                      | 304 psi (2094 kPa)                                                              |
| Piston Speed              | 1134 ft./min. (5.76 m/s)                                                        |
| Compression Ratio         | 17:1                                                                            |
| Engine Speed              | 1800 rpm                                                                        |
| Overspeed Limit           | 2100 rpm                                                                        |
| Oil Capacity              | 8.19 gallons (31.0 liters)                                                      |
| Battery                   | 12V 128Ah x 1                                                                   |

| Fuel System                    |                            |            |
|--------------------------------|----------------------------|------------|
| Recommended Fuel               | ASTM-D975-No.1 & No.2-D    |            |
| Maximum Fuel Flow (per hour)   | 22.7 gallons (85.9 liters) |            |
| Maximum Inlet Restriction (Hg) | 5.9 in. (150 mm)           |            |
| Fuel Tank Capacity             | 100 gallons (380 liters)   |            |
| <b>Fuel Consumption</b>        | <b>gph</b>                 | <b>lph</b> |
| At full load                   | 13.6                       | 51.6       |
| At 3/4 load                    | 10.4                       | 39.5       |
| At 1/2 load                    | 7.7                        | 29.3       |
| At 1/4 load                    | 4.5                        | 17.2       |

| Cooling System                         |                            |
|----------------------------------------|----------------------------|
| Fan Load                               | 5.6 hp (4.2 kW)            |
| Coolant Capacity (with radiator)       | 14.3 gallons (54.0 liters) |
| Coolant Flow Rate (per minute)         | 56.8 gallons (215 liters)  |
| Heat Rejection to Coolant (per minute) | 7489 Btu (7.90 MJ)         |
| Heat Rejection to Room (per minute)    | 2095 Btu (2.21 MJ)         |
| Maximum Coolant Friction Head          | 8.1 psi (5.6 kPa)          |
| Maximum Coolant Static Head            | 29.5 feet (9.0 meters)     |
| Ambient Temperature Rating             | 104°F (40°C)               |

| Air                             |                                     |
|---------------------------------|-------------------------------------|
| Combustion Air                  | 619 cfm (17.5 m <sup>3</sup> /min)  |
| Maximum Air Cleaner Restriction | 25 in. H <sub>2</sub> O (6.25 kPa)  |
| Alternator Cooling Air          | 1459 cfm (41.3 m <sup>3</sup> /min) |
| Radiator Cooling Air            | 8120 cfm (230 m <sup>3</sup> /min)  |

| Exhaust System        |                                     |
|-----------------------|-------------------------------------|
| Gas Flow (full load)  | 1371 cfm (38.8 m <sup>3</sup> /min) |
| Gas Temperature       | 905°F (485°C)                       |
| Maximum Back Pressure | 40.0 in. H <sub>2</sub> O (10 kPa)  |

| Amperage                                            |                     |
|-----------------------------------------------------|---------------------|
| Rated Voltage                                       | Maximum Amps        |
| 1Ø 120 Volt                                         | 488.9 Amps (4 wire) |
| 1Ø 240 Volt                                         | 244.4 Amps (4 wire) |
| 3Ø 240 Volt                                         | 529 Amps            |
| 3Ø 480 Volt                                         | 264 Amps            |
| Main Line Circuit Breaker Rating                    | 600 Amps            |
| Over Current Relay Trip Set Point<br>480V Mode Only | 256 Amps            |

### WARRANTY\*

#### John Deere Engine

12 months from date of purchase with unlimited hours or 24 months from date of purchase with 2000 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

### 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, shock 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 Series Generator

**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

**WhisperWatt at 23 feet**

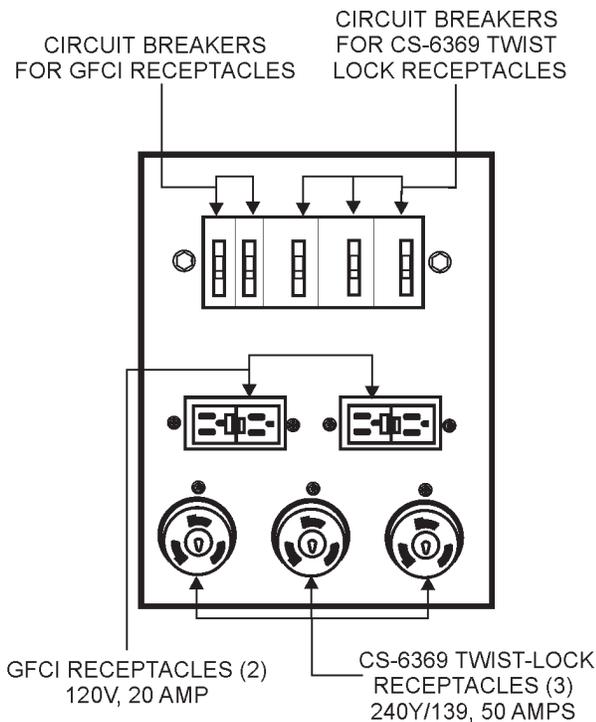
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DECIBELS

### 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.
- **Special Batteries** — long life batteries provide extra engine cranking power.
- **Spring Isolaters** — 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 or triple axle configuration.

### GENERATOR OUTPUT PANEL



### OPTIONAL CONTROL FEATURES

- **Audible alarm** — alerts operator of abnormal conditions

### OPTIONAL OUTPUT CONNECTIONS

- **Cam-Lock 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.

### OPTIONAL FUEL CELL FEATURES

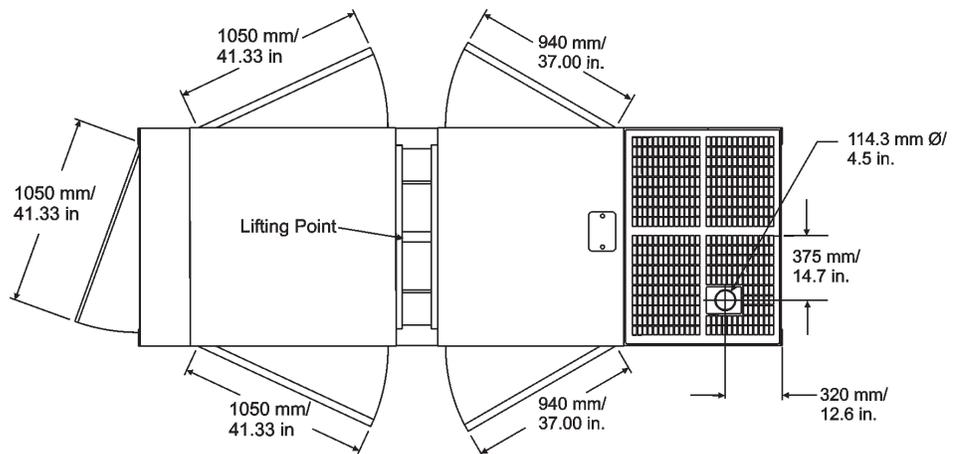
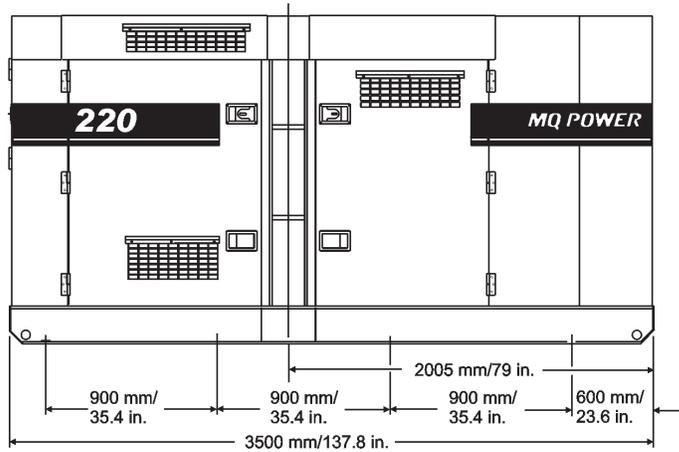
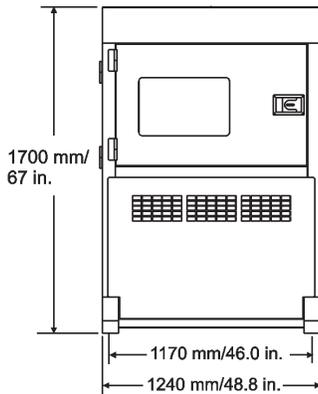
- **Trailer Fuel Tank** — Additional fuel cell for extended runtime operation. Contains a leak sensor, low fuel level switch, and a secondary containment tank. UL142 listed.
  - 12 hours of minimum run time.
  - 24 hours of minimum run time.



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### DIMENSIONS



Generator can be placed on a  
MQ Power Model TRLR220XF  
Tandem Axle Trailer

| Weight                      |                        |
|-----------------------------|------------------------|
| Dry Weight                  | 6,902 lbs. (3,130 kg)  |
| Wet Weight                  | 7,753 lbs. (3,520 kg)  |
| Max. Lifting Point Capacity | 14,050 lbs. (6,373 kg) |



Manufactured by Denyo Co.

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DCA220SSJ Rev. #6 (08/26/11)



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