



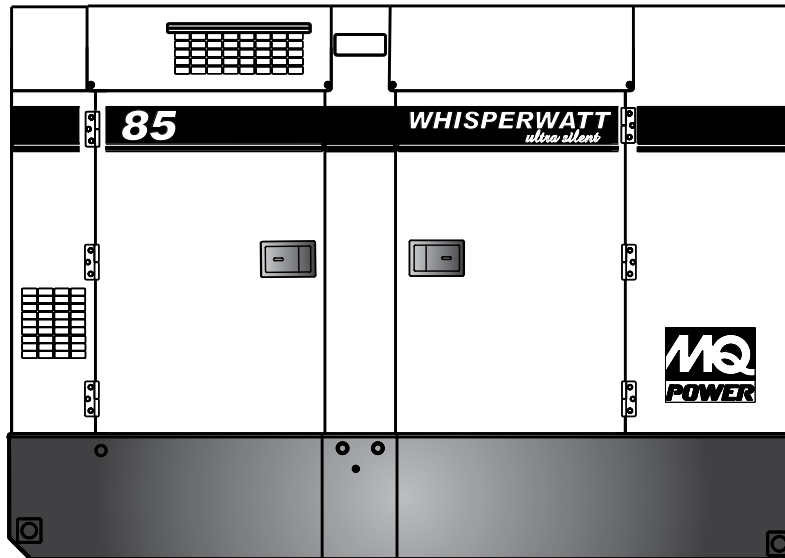
# DCA85USJ

## MQ POWER WhisperWatt™ Series Generator

Prime Rating — 68 kW (85 kVA)

Standby Rating — 75 kW (94 kVA)

60 Hertz



### STANDARD FEATURES

- Heavy duty, 4-cycle, direct injection, turbocharged 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 (Crystal Sync) — 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 63 dB(A) at 23 feet. Fully lockable enclosure allows safe unattended operation.
- Internal fuel tank with direct reading of fuel gauge.
- Seven stage powder coat paint system provides durability and weather protection.
- 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.
- 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.
- Simultaneous single and three phase power.
- Voltage selector switch offers the operator a wide range of voltages that are manually selectable. Fine tuning of the output voltage can be accomplished by adjusting the voltage regulator control knob to obtain the desired voltage.
- 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  | Zig Zag |
| Phase   | 3  | Single  |
| Standby Output  | 75 KW (94 KVA)   | 66 KW   |
| Prime Output  | 68 KW (85 KVA)   | 60 KW   |
| 3Ø Voltage (L-L/L-N)<br>Voltage Selector Switch at 3Ø 240/139   | 208Y/120, 220Y/127,<br>240Y/139                                      | N/A     |
| 3Ø Voltage (L-L/L-N)<br>Voltage Selector Switch at 3Ø 480/277   | 416Y/240, 440Y/254,<br>480Y/277                                      | N/A     |
| 1Ø Voltage (L-L/L-N)<br>(Voltage Selector Switch 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   | 60 Hz  |         |
| Frequency Regulation:<br>No Load to Full Load                   | 3-5% under varying loads from no load<br>to 100% rated load          |         |
| Frequency Regulation: Steady State                              | ±0.5% of mean value for constant loads<br>from no load to full load. |         |
| Insulation  | Class F  |         |
| Sound Level dB(A) Full load at 23 feet                          | 63   |         |

| Engine Specifications     |   |
|---------------------------|---|
| Make / Model              | John Deere / 4045HF285                                  |
| Emissions                 | EPA Tier 3 Certified                                    |
| Starting System           | Electric  |
| Design                    | 4-cycle, water cooled,<br>direct injection turbocharged |
| Displacement              | 274.6 in <sup>3</sup> (4500 cc)                         |
| No. cylinders             | 4   |
| Bore x Stroke (mm)        | 106 x 127   |
| Gross Engine Power Output | 113.0 bhp (84.3 kWm)                                    |
| BMEP                      | 162 psi (1119 kPa)                                      |
| Piston Speed              | 1500 ft./min. (7.62 m/s)                                |
| Compression Ratio         | 17:1  |
| Engine Speed              | 1800 rpm  |
| Overspeed Limit           | 2100 rpm  |
| Oil Capacity              | 3.49 gallons (13.2 liters)                              |
| Battery                   | 12V 72Ah x 1  |

| Fuel System                    |                          |            |
|--------------------------------|--------------------------|------------|
| Recommended Fuel               | ASTM-D975-No.1 & No.2-D  |            |
| Maximum Fuel Flow (per hour)   | 15.9 gallons (60 liters) |            |
| Maximum Inlet Restriction (Hg) | 5.9 in. (150 mm)         |            |
| Fuel Tank Capacity             | 126 gallons (150 liters) |            |
| <b>Fuel Consumption</b>        | <b>gph</b>               | <b>lph</b> |
| At full load                   | 5.3                      | 20.1       |
| At 3/4 load                    | 4.3                      | 16.2       |
| At 1/2 load                    | 3.1                      | 11.9       |
| At 1/4 load                    | 2.0                      | 7.6        |

| Cooling System                         |                            |
|--|----------------------------|
| Fan Load                               | 1.6 hp (1.2 kW)            |
| Coolant Capacity (with radiator)       | 3.70 gallons (14.0 liters) |
| Coolant Flow Rate (per minute)         | 38 gallons (144 liters)    |
| Heat Rejection to Coolant (per minute) | 3300 Btu (3.5 MJ)          |
| Heat Rejection to Room (per minute)    | 582 Btu (0.614 MJ)         |
| Maximum Coolant Friction Head          | 4.0 psi (27.6 kPa)         |
| Maximum Coolant Static Head            | 32 feet (9.8 meters)       |
| Ambient Temperature Rating             | 104°F (40°C)               |

| Air                             |                                    |
|---------------------------------|------------------------------------|
| Combustion Air                  | 226 cfm (6.4 m <sup>3</sup> /min)  |
| Maximum Air Cleaner Restriction | 25 in. H <sub>2</sub> O (6.25 kPa) |
| Alternator Cooling Air          | 911 cfm (45 m <sup>3</sup> /min)   |
| Radiator Cooling Air            | 1589 cfm (30 m <sup>3</sup> /min)  |
| Minimum Air Opening to Room     | 7.85 sq. ft. (0.73 sq. m)          |
| Minimum Discharge Opening       | 3.87 sq. ft. (0.36 sq. m)          |

| Exhaust System        |                                     |
|-----------------------|-------------------------------------|
| Gas Flow (full load)  | 674 cfm (19.1 m <sup>3</sup> /min)  |
| Gas Temperature       | 1094°F (590°C)                      |
| Maximum Back Pressure | 30.0 in. H <sub>2</sub> O (7.5 kPa) |

| Amperage  |   |
|---|---|
| Rated Voltage                                       | Maximum Amps                            |
| 1Ø 120 Volt   | 188.9Amps (4 wire)<br>250A x 2 (Zigzag) |
| 1Ø 240 Volt   | 94.4Amps (4 wire)<br>250A (Zigzag)      |
| 3Ø 240 Volt   | 204 Amps                                |
| 3Ø 480 Volt   | 102 Amps                                |
| Main Line Circuit Breaker Rating                    | 250 Amps                                |
| Over Current Relay Trip Set Point<br>480V Mode Only | 102 Amps                                |

### WARRANTY\*

#### John Deere

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 WhisperWatt™ Series Generator

### MQ POWER DECIBEL LEVELS

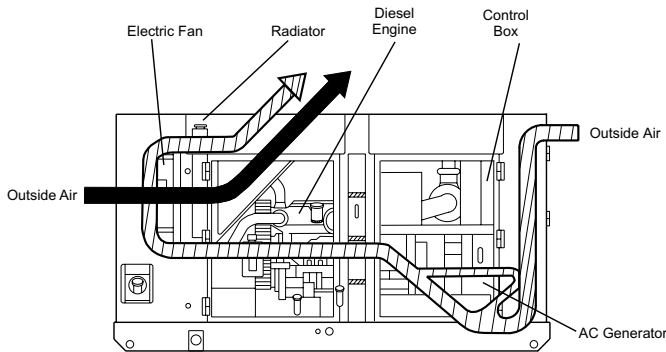
Our soundproof housing allows substantially lower operating noise levels than competitive designs. WhisperWatts are at home on construction sites, in residential neighborhoods, and at hospitals — just about anywhere.

- 90 — Subway / truck traffic
- 80 — Average city traffic
- **WhisperWatt at 23 feet**
- 70 — Inside car at 60 mph
- 60 — Air conditioner at 20 feet
- 50 — Normal conversation



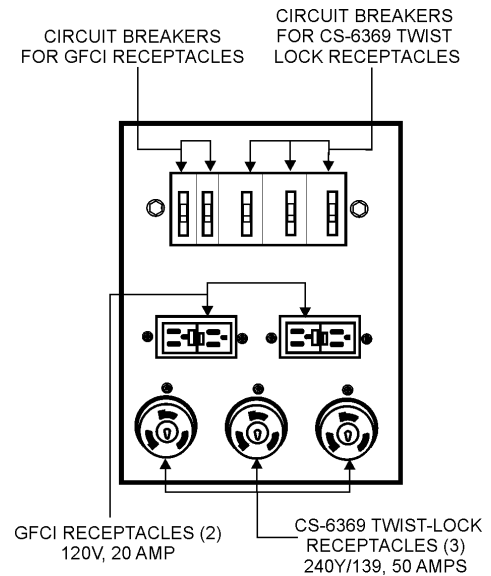
### ULTRA-SILENT FEATURES

- **Low Noise Muffler** — Large capacity low noise muffler minimizes exhaust sound.
- **Soundproof Casing** — The new design divides the cabinet into three sections, separating the engine, muffler and radiator for more efficient cooling and reduces noise from the engine and fans.
- **New Cooling System** — An advanced design uses two separate air intake systems to cool the generator. The engine fan draws air in to cool the engine and generator housing while a second electric fan directly cools the radiator. With less air being drawn into the generator through each fan, considerably less noise is produced through the top of the generator.
- **Environmental Design** — Constructed using an integrated environmental skid and fuel tank. This design fully contains fuel leakage and any liquid that might leak from the engine such as lube oil or radiator coolant. All potentially hazardous liquids are contained without contaminating the surrounding area.



Flow of Cooling Air

### GENERATOR OUTPUT PANEL



### OPTIONAL CONTROL FEATURES

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

### OPTIONAL GENERATOR FEATURES

- **Electronic Governor Control (Crystal Sync)** — maintains frequency to within  $\pm 0.25\%$  from no load to full load.
- **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 Isolators** — provides extra vibration protection for standby applications.
- **Low Coolant Level Shutdown** — provides protection from critically low coolant levels. Includes control panel warning light.
- **Trailer Mounted Package** — meets National Highway Traffic Safety Administration (NHTSA) regulations. Trailer is equipped with electronic or surge brakes with tandem axle configuration.

### OPTIONAL OUTPUT CONNECTIONS

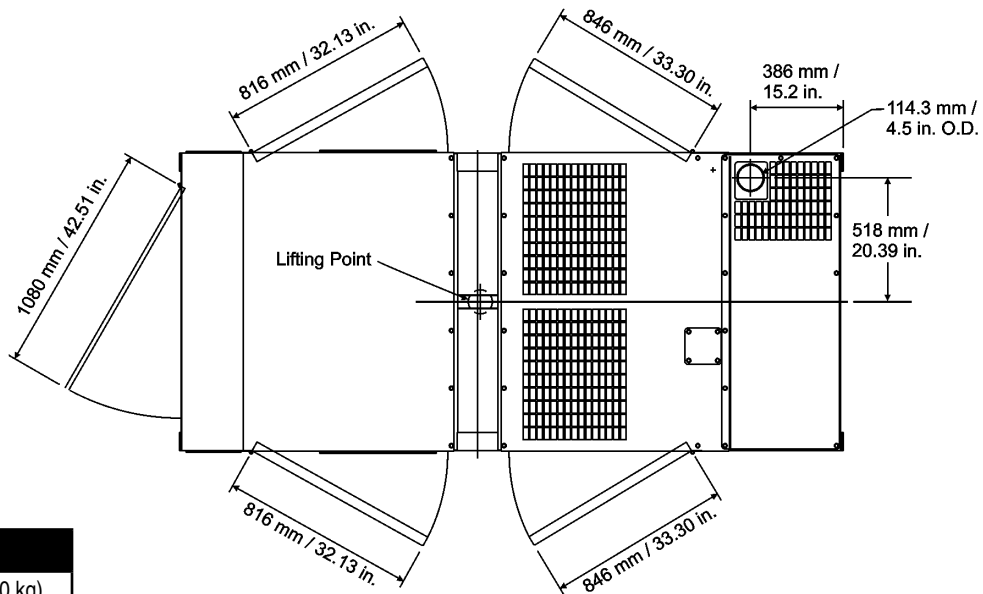
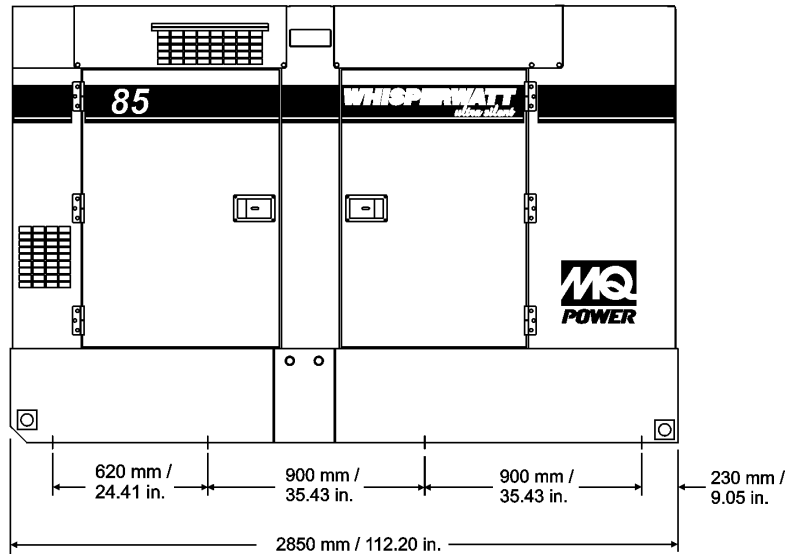
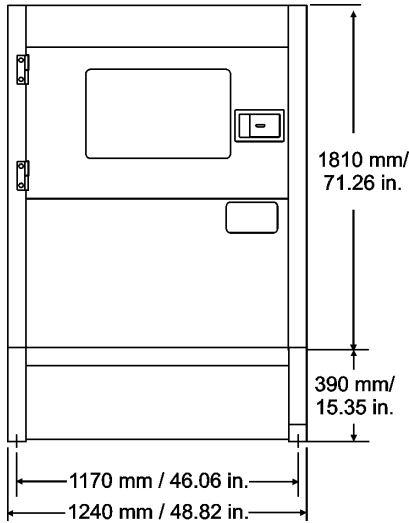
- **Cam-Lock Connectors** — provides quick disconnect alternative to bolt-on connectors.
- **Pin and Sleeve Connectors** — provides industry standard connectors for all voltage requirements.
- **Output Cable** — available in any custom length and size configuration.



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## MQ POWER WhisperWatt™ Series Generator

### DIMENSIONS



| Weight                      |                        |
|-----------------------------|------------------------|
| Dry Weight                  | 5,094 lbs. (2,310 kg)  |
| Wet Weight                  | 6,048 lbs. (2,743 kg)  |
| Max. Lifting Point Capacity | 14,050 lbs. (6,370 kg) |

Generator can be placed on a MQ Power Model TRLR85US Tandem Axle Trailer

Manufactured by Denyo Co.

Your Multiquip dealer is:

