



# DCA220SSJU4F

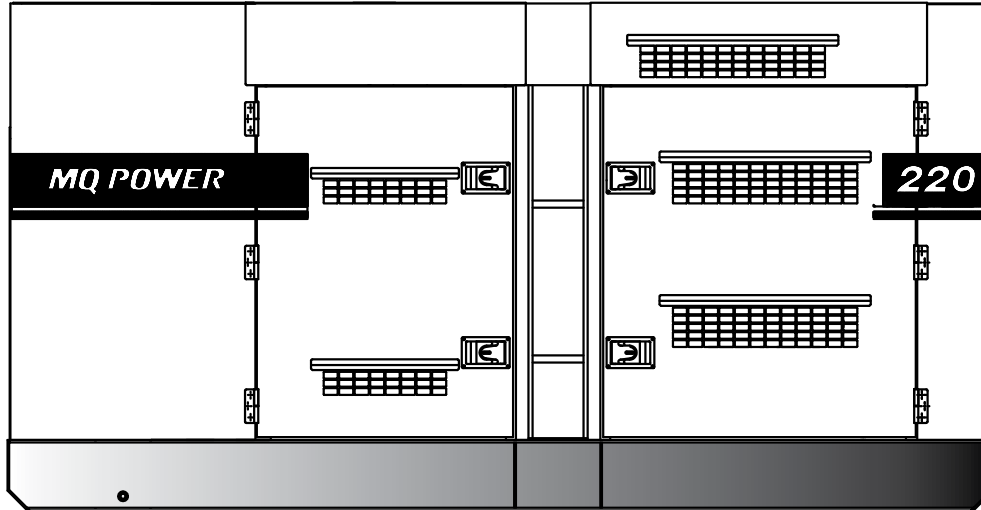
## MQ POWER Whisperwatt™ Series

### WhisperWatt™ 220

Prime Rating — 176 kW (220 kVA)

Standby Rating — 194 kW (242 kVA)

3-Phase, 60 Hertz, 0.8 PF



#### STANDARD FEATURES

- Heavy duty, 4-cycle, electronic direct injection, turbocharged, charged air cooler, variable speed fan, 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 5-13.2.6).
- Sound attenuated, weather resistant, steel housing provides operation at 74 dB(A) at 23 feet. Fully lockable enclosure allows safe unattended operation.
- Internal fuel tank with direct reading fuel gauges are standard.
- 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.
  - High visibility LCD display with heated screen and alphanumeric readout.
  - Operational temperature range of  $-40^{\circ}$  to  $85^{\circ}$  C.
  - Modbus interface for gauge panel and expansion options.
  - DPF cleaning cycle indication.
- Automatic safety shutdown system monitors the water temperature, engine oil pressure, low coolant, low DEF, overspeed, and overcrank. Warning lights indicate abnormal conditions.
- 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. All are NEMA standard.
- Fuel/water separator. Removes condensation from fuel for extended engine life.
- Emergency stop switch — when manually activated, shuts down generator in the event of an emergency.
- EPA emissions certified - Tier 4 Final emissions compliant.
  - Engine fitted with DOC, DPF and SCR.



# DCA220SSJU4F

## MQ POWER Whisperwatt™ Series

### SPECIFICATIONS

Generator Specifications	
Design	Revolving field, self-ventilated 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) Voltage Change-Over Bus Bars at 3Ø 240/139	208Y/120, 220Y/127, 240Y/139
3Ø Voltage (L-L/L-N) Voltage Change-Over Bus Bars at 3Ø 480/277	416Y/240, 440Y/254, 480Y/277
1Ø Voltage (L-L/L-N) Voltage Change-Over Bus Bars at 1Ø 240/120	N/A
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 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	74

Engine Specifications	
Make / Model	John Deere / 6068HFG09
Emissions	EPA Tier 4 Final Certified
Starting System	Electric
Design	4-cycle, water cooled, direct injection, turbocharged, charged air cooled, EGR, DOC, DPF and SCR.
Displacement	415 in <sup>3</sup> (6.8 liters)
No. cylinders	6
Bore x Stroke	4.17 x 4.99 in. (106 x 127 mm)
Gross Engine Power Output	322 hp (241 kW)
BMEP	316 psi (2180 kPa)
Piston Speed	1500 ft/min (7.62 m/s)
Compression Ratio	16.7 : 1
Engine Speed	1800 rpm
Overspeed Limit	2070 rpm
Oil Capacity	8.18 gallons (31 liters)
Battery	12V 150Ah x 1

Fuel System	
Recommended Fuel	ASTM-D975-No.1 & No.2-D*
Maximum Fuel Flow (per hour)	44.3 gallons (168 liters)
Maximum Inlet Restriction (Hg)	8.9 in (225 mm)
Fuel Tank Capacity	69 gallons (260 liters)
<b>Fuel Consumption</b>	<b>gph</b> <b>lph</b>
At full load	12.5      47.1
At 3/4 load	9.7      36.4
At 1/2 load	6.9      26.1
At 1/4 load	4.4      16.7
DEF Tank Capacity	14.5 gallons (55 liters)

\* - Use ultra-low sulfur diesel fuel.

Cooling System	
Fan Load	19.4 hp (14.5 kW)
Coolant Capacity (with radiator)	10.3 gallons (39 liters)
Coolant Flow Rate (per minute)	111 gallons (420 liters)
Heat Rejection to Coolant (per minute)	8,652 Btu (9.13 MJ)
Heat Rejection from Engine (per minute)	882.8 Btu (0.93 MJ)
Maximum Coolant Friction Head	7.3 psi (50 kPa)
Maximum Coolant Static Head	78.7 ft. (24.1 m)
Ambient Temperature Rating	104°F (40°C)

Air	
Combustion Air	537 cfm (15.2 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	9450 cfm (267.5 m <sup>3</sup> /min)

Exhaust System	
Gas Flow (full load)	1,123 cfm (31.8 m <sup>3</sup> /min)
Gas Temperature	831°F (444°C)
Maximum Back Pressure	70 in. H <sub>2</sub> O (23.96 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 480V Mode Only	256 Amps

### WARRANTY\*

#### John Deere Engine

12 months from date of purchase with unlimited hours or 24 months and prior to the accumulation of 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 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.



# DCA220SSJU4F

## MQ POWER Whisperwatt™ Series

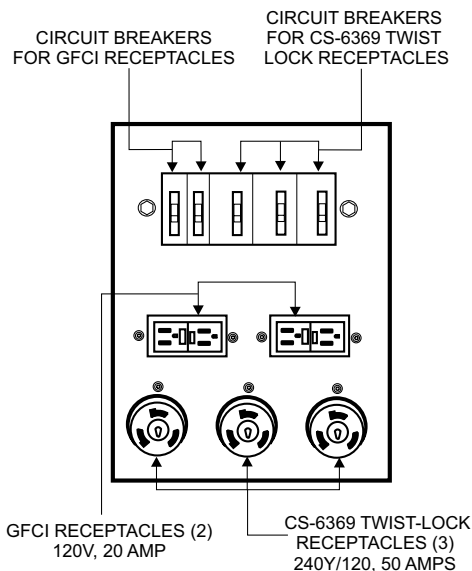
### MQ POWER DECIBEL LEVELS

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



### 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.
- **Trailer mounted package** — highway legal trailer with electronic or surge brakes on all axles. Extra capacity fuel tanks are also available.

### OPTIONAL CONTROL FEATURES

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

### OPTIONAL FUEL CELL FEATURES

- **Trailer Fuel Tank** — a second fuel cell located in the trailer allows for extended run time.
- **Sub-base fuel cells (double wall)** — 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.

### OPTIONAL OUTPUT CONNECTIONS

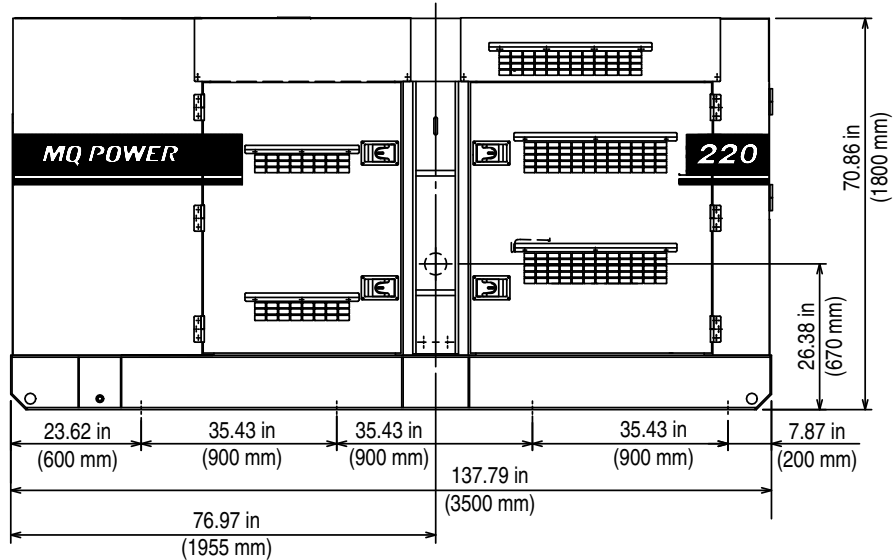
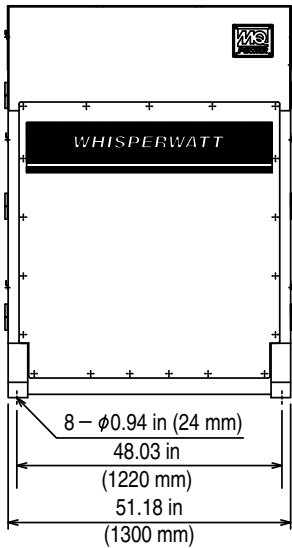
- **Cam-Loks** — provides quick disconnect alternative to bolt-on connectors.
- **Pin and Sleeve Connectors** — provides industry standard connectors for all voltage requirements.
- **Output Cable** — available in any custom length and size configuration.



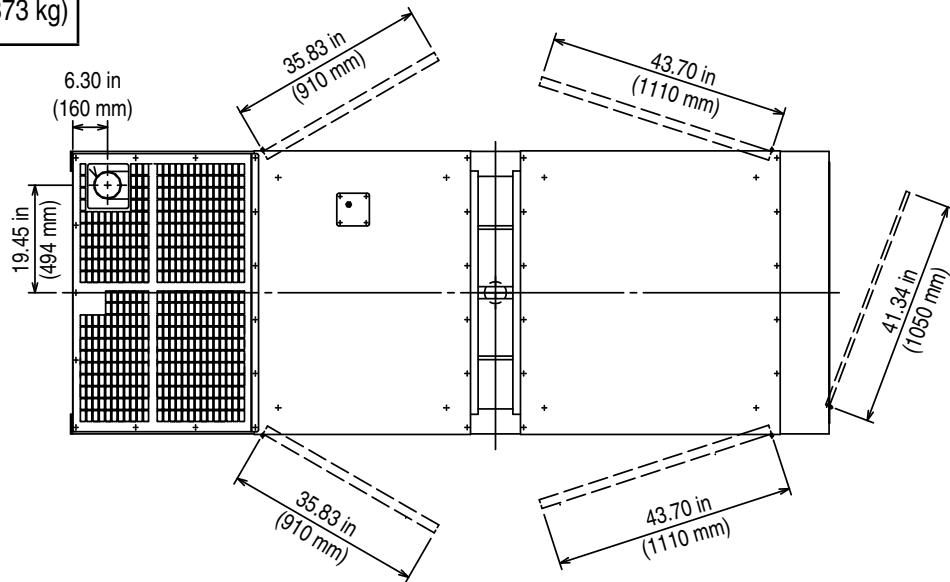
# DCA220SSJU4F

## MQ POWER Whisperwatt™ Series

### DIMENSIONS



Weight	
Dry Weight	7,695 lbs. (3,490 kg)
Wet Weight	8,489 lbs. (3,850 kg)
Max. Lifting Point Capacity	14,050 lbs. (6,373 kg)



Manufactured by Denyo Co.

**Your Multiquip dealer is:**

Gonneville, Inc.  
211 Calle Pintesco Ste. #A  
San Clemente, CA. 92672  
949-248-7297  
Sales@Gonneville.com | Gonneville.com



# EXHAUST EMISSION DATA SHEET

## MQ POWER GENERATOR SET

Model: DCA-220SSJU4F



The engine used in this generator set is certified to comply with United States EPA Tier 4 and CARB Mobile Off-Highway emission regulations.

### ENGINE DATA

<b>Manufacturer:</b> John Deere	<b>Bore:</b> 4.64 in. (106 mm)
<b>Model:</b> 6068HFG09	<b>Stroke:</b> 5.35 in. (127 mm)
<b>Type:</b> 4- Cycle, in-line, 6 Cylinder, Diesel	<b>Displacement:</b> 415 cid (6.8 liters)
<b>Aspiration:</b> Turbocharger Air Cooler. Electronic Direct Injection ECM, EGR, DOC, SCR	<b>Compression Ratio:</b> 16.7:1

### PERFORMANCE DATA

SAE Gross HP @ 1800 RPM (60 Hz)	323
Rated Load Fuel Consumption (gal/Hr)	12.5
Rated Load Exhaust Gas Flow (cfm)	1123
Rated Load Exhaust Gas Temperature (°F)	831

United States EPA - Mobile Off-Highway Tier 4 Limits - 174 ≤ ~ <751 BHP

Criteria Pollutant	Emission Requirements	Certified Engine Emissions
NOx (Oxides of Nitrogen as NO2)	0.298 gr/bhp-hr	0.119 gr/bhp-hr
HC (Total Unburned Hydrocarbons)	N/A gr/bhp-hr	N/A gr/bhp-hr
NOx + HC (Combined)	N/A gr/bhp-hr	N/A gr/bhp-hr
CO (Carbon Monoxide)	2.60 gr/bhp-hr	0.022 gr/bhp-hr
PM (Particulate Matter)	0.014 gr/bhp-hr	0.002 gr/bhp-hr
NMHC (Non-Methane Hydrocarbons)	0.141 gr/bhp-hr	0.022 gr/bhp-hr
NMHC + NOx	N/A gr/bhp-hr	N/A gr/bhp-hr

EPA Engine Family:	EJDXL06.8302
EPA Certificate of Conformance:	EJDXL06.8302-003
ARB Executive Order:	U-R-004-0477
Effective Date:	Model Year 2014

*Note: Engine operation with excessive air intake or exhaust restriction beyond factory published maximum limits, or with improper service maintenance, may result in higher emission levels.*

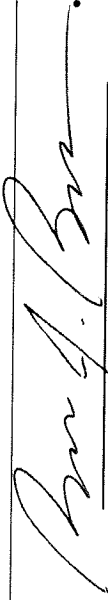


**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**2014 MODEL YEAR**  
**CERTIFICATE OF CONFORMITY**  
**WITH THE CLEAN AIR ACT OF 1990**

**OFFICE OF TRANSPORTATION  
 AND AIR QUALITY**  
**ANN ARBOR, MICHIGAN 48105**

**Certificate Issued To: Deere & Company**  
 (U.S. Manufacturer or Importer)  
**Certificate Number: EJDXL06.8302-003**

**Effective Date:**  
04/17/2013  
**Expiration Date:**  
12/31/2014

  
 Byron J. Bunker, Division Director  
 Compliance Division

**Issue Date:**  
04/17/2013  
**Revision Date:**  
N/A

**Model Year:** 2014  
**Manufacturer Type:** Original Engine Manufacturer  
**Engine Family:** EJDXL06.8302

**Mobile/Stationary Indicator:** Both  
**Emissions Power Category:** 130<kW<=560  
**Fuel Type:** Diesel  
**After Treatment Devices:** PTOX-DPF-Active, Selective Catalytic Reduction, Ammonia Slip Catalyst, Diesel Oxidation Catalyst  
**Non-after Treatment Devices:** Electronic/Electric EGR - Cooled, Non-standard Non-After Treatment Device Installed, Electronic Control

Pursuant to Section 111 and Section 213 of the Clean Air Act (42 U.S.C. sections 7411 and 7547) and 40 CFR Parts 60 and 1039, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following engines, by engine family, more fully described in the documentation required by 40 CFR Parts 60 and 1039 and produced in the stated model year.

This certificate of conformity covers only those new compression-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Parts 60 and 1039 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Parts 60 and 1039. It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Parts 60 and 1039. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR Parts 60 and 1039.

This certificate does not cover engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate. The actual engine power may lie outside the limits of the Emissions Power Category shown above. See the certificate application for details.

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

**IT IS ORDERED AND RESOLVED:** That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2014	EJDXL06.8302	4.5, 6.8	Diesel	8000
<b>SPECIAL FEATURES &amp; EMISSION CONTROL SYSTEMS</b>			<b>TYPICAL EQUIPMENT APPLICATION</b>	
Charge Air Cooler, Diesel Oxidation Catalyst, Electronic Direct Injection, Electronic Control Module, Exhaust Gas Recirculation, Periodic Trap Oxidizer, Turbocharger, Selective Catalytic Reduction-Urea, Ammonia Oxidation Catalyst			Tractor, Loaders, Dozer, Pump, Compressor, Generator Set, Other Industrial Equipment	

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.03	0.16	--	0.03	0.003	--	--	--

**BE IT FURTHER RESOLVED:** That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

**This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.**

Executed at El Monte, California on this 6<sup>th</sup> day of June 2013.

*Erik White*  
 Erik White, Chief  
 Mobile Source Operations Division