



# DCA400SSV

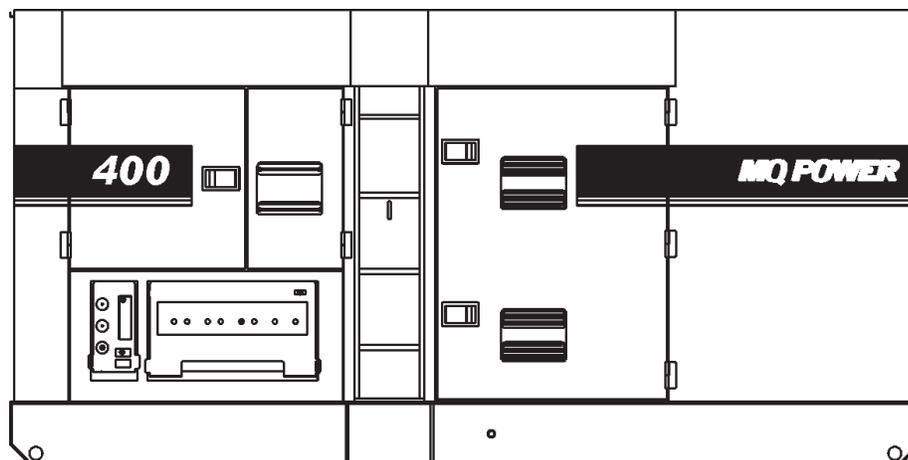
## WhisperWatt™ Generator

### WhisperWatt™ 400

Prime Rating: 320 kW (400 kVA)

Standby Rating: 352 kW (440 kVA)

60 Hertz



#### Standard Features

- **Heavy duty, turbocharged, 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 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 72 dB(A) at 23 feet. Fully lockable enclosure allows safe unattended operation.
- **Internal fuel tank** with direct reading fuel gauges are standard.
- **Fuel / water separator** removes condensation from fuel for extended engine life.
- **Seven-stage powder coat paint** provides durability and weather protection.
- **Simultaneous single and three phase power.**
- **EPA emissions certified.** - Tier 2 emissions compliant.
- **Complete engine analog instrumentation** includes DC ammeter, oil pressure gauge, water temp. gauge, fuel level gauge, tachometer/hour meter, preheat indicator, manual engine speed control, emergency shutdown monitors, and emergency stop button.
- **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 water temperature, engine oil pressure, overspeed, and overcrank. Warning lights indicate abnormal conditions.
- **Low coolant level shutdown system** provides protection from critically low coolant levels. Includes control panel warning light.
- **Auto start/stop control** allows generator to start automatically in the event of a commercial power failure.
- **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.
- **Emergency stop switch.**
- **Battery switch.**
- **Voltage selector switch** allows easy to change voltages as your applications require. 240/480 Buss Bar.



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## WhisperWatt™ Generator

### Specifications

#### Generator Specifications

|   |  |
|---|--|
| Design  | Revolving field, Self-ventilated<br>Drip-proof, Single bearing       |
| No. of Poles                                  | 4-pole   |
| Excitation                                    | Brushless with AVR   |
| Standby Output                                | 352 KW (440 KVA)   |
| Prime Output                                  | 320 KW (400 KVA)   |
| Generator RPM                                 | 1800   |
| Voltage — 3Ø                                  | 208, 220, 240, 415, 440, 480V<br>Reconnectable                       |
| Voltage — 1Ø                                  | 120, 127, 139, 240, 254, 277V Adjustable                             |
| Armature Connection                           | Star with neutral  |
| Voltage Regulation<br>(No load to full load)  | ±0.5%  |
| Power Factor                                  | 0.8  |
| Frequency                                     | 60 Hz  |
| Frequency Regulation:<br>No Load to Full Load | Isochronous under varying loads from<br>no load to 100% rated load   |
| Frequency Regulation:<br>Steady State         | ±0.25% of mean value for constant loads<br>from no load to full load |
| Insulation                                    | Class F  |
| Sound Level dB(A)<br>Full load at 23 feet     | 72   |

#### Engine Specifications

|                               |   |
|-------------------------------|---|
| Make / Model                  | Volvo / TAD1241GE   |
| Emissions                     | EPA Tier 2 Certified  |
| Starting System               | Electric  |
| Design                        | 4-cycle, water cooled,<br>Direct Injection, turbocharged,<br>air to air Intercooled |
| Displacement                  | 12,130 cc   |
| No. cylinders                 | 6   |
| Bore x Stroke (mm)            | 131 x 150   |
| Gross Engine Power Output     | 534 bhp (398 kWm)   |
| BMEP                          | 286 psi (1,970 kPa)   |
| Piston Speed                  | 1,776 ft./min. (9.02 m/s)   |
| Compression Ratio             | 17.5 : 1  |
| Engine Speed                  | 1800 rpm  |
| Overspeed Limit               | 2100 rpm  |
| Oil capacity gallons (liters) | 9.2 gal. (35 liters)  |
| Battery                       | 12V 150Ah x 2 (24V System)  |

#### Fuel System

|                                |                          |            |
|--------------------------------|--------------------------|------------|
| Maximum Fuel Flow (per hour)   | 145 gallons (549 liters) |            |
| Maximum Inlet Restriction (Hg) | 4.8 in. (122 mm)         |            |
| Fuel Tank Capacity             | 129 gallons (490 liters) |            |
| <b>Fuel Consumption</b>        | <b>gph</b>               | <b>lph</b> |
| At full load                   | 20.6                     | 78.1       |
| At 3/4 load                    | 15.4                     | 58.3       |
| At 1/2 load                    | 10.8                     | 41.0       |
| At 1/4 load                    | 6.3                      | 23.7       |

#### Cooling System

|  |                          |
|--|--------------------------|
| Fan Load                               | 15 HP (20 KW)            |
| Coolant Capacity (with radiator)       | 11.6 gallons (44 liters) |
| Coolant Flow Rate (per minute)         | 95 gallons (360 liters)  |
| Heat Rejection to Coolant (per minute) | 8,132 Btu (8.56 MJ)      |
| Heat Rejection to Engine (per minute)  | 2,625 Btu (2.77 MJ)      |
| Maximum Coolant Friction Head          | 8.7 psi (60 kPa)         |
| Maximum Coolant Static Head            | 16.74 feet (5.1 meters)  |
| Ambient Temperature Rating             | 95°F (35°C)              |

#### Air

|                                 |                                  |
|---------------------------------|----------------------------------|
| Combustion Air                  | 1,024 cfm (29.0 m³/min)          |
| Maximum Air Cleaner Restriction | 8 in. H <sub>2</sub> O (2.0 kPa) |
| Alternator Cooling Air          | 2,797 cfm (79.0 m³/min)          |
| Radiator Cooling Air            | 13,771 cfm (399 m³/min)          |

#### Exhaust System

|                       |                                    |
|-----------------------|------------------------------------|
| Gas Flow (full load)  | 2,543 cfm (72.0 m³/min)            |
| Gas Temperature       | 914°F (490°C)                      |
| Maximum Back Pressure | 40.2 in. H <sub>2</sub> O (10 kPa) |

#### Amperage

| Rated Voltage                     | Maximum Amps        |
|-----------------------------------|---------------------|
| 1Ø 120 Volt                       | 888.9 Amps (4 wire) |
| 1Ø 240 Volt                       | 444.4 Amps (4 wire) |
| 3Ø 240 Volt                       | 962.3 Amps          |
| 3Ø 480 Volt                       | 481.1 Amps          |
| Main Line Circuit Breaker Rating  | 1000 Amps           |
| Over Current Relay Trip Set Point | 480 Amps            |

#### Warranty\*

##### Volvo Engine

24 months from date of purchase with unlimited hours.

##### 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.

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.**



# DCA400SSV WhisperWatt™ Generator

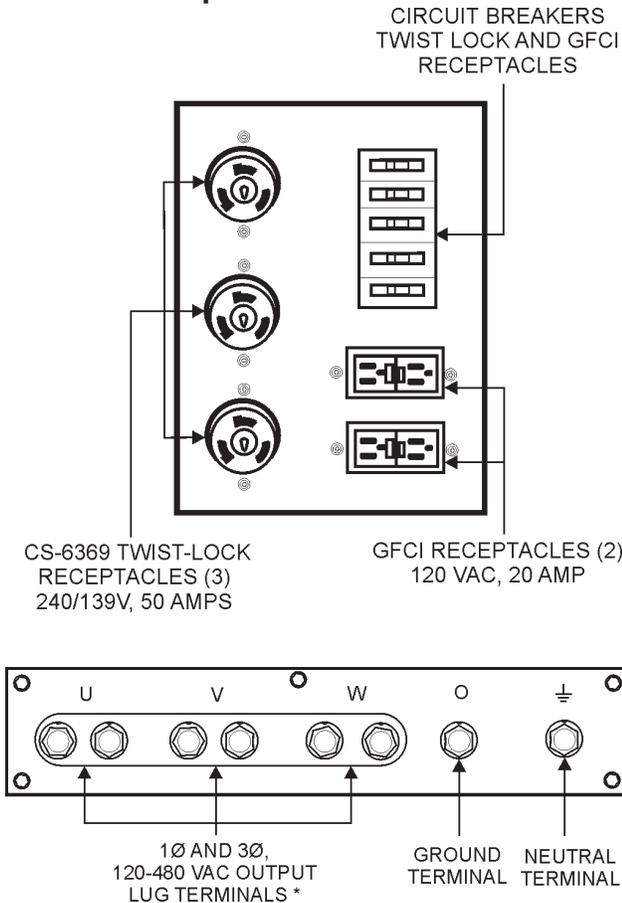
## MQ POWER DECIBEL LEVELS

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
- 72.0 — **WhisperWatt at 23 feet**
- 70 — Inside car at 60 mph
- 60 — Air conditioner at 20 feet
- 50 — Normal conversation



## Generator Output Panels



\* Various output voltages may be obtained by using the Voltage Change-Over Board and the Voltage Selector Switch.

## 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 Isolators** — provides extra vibration protection for standby applications.
- Trailer mounted package** — highway legal trailer with electronic or surge brakes with single, double, or triple axle configuration. Extra capacity fuel tanks are also available.

## 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.

## Optional Control Features

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

## Optional Fuel Cell Features

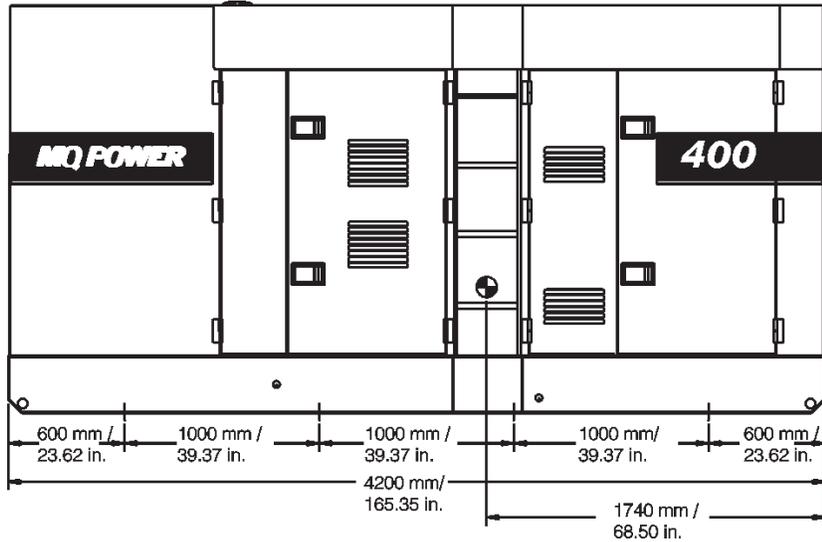
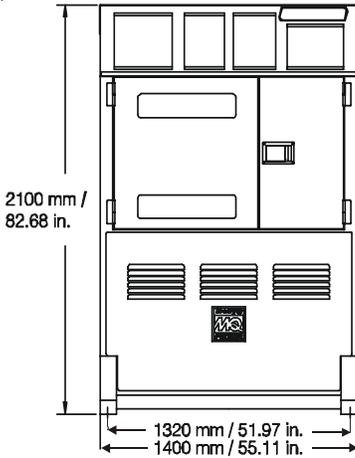
- Trailer fuel tank** — a second fuel cell located in the trailer allows for extended run time.
- Subbase fuel cells (double wall)** — Additional fuel cell for extended runtime operation. Contains a leak sensor, low fuel level switch, and a secondary containment tank. UL142 listed.
  - 12 hours of minimum run time.
  - 24 hours of minimum run time.



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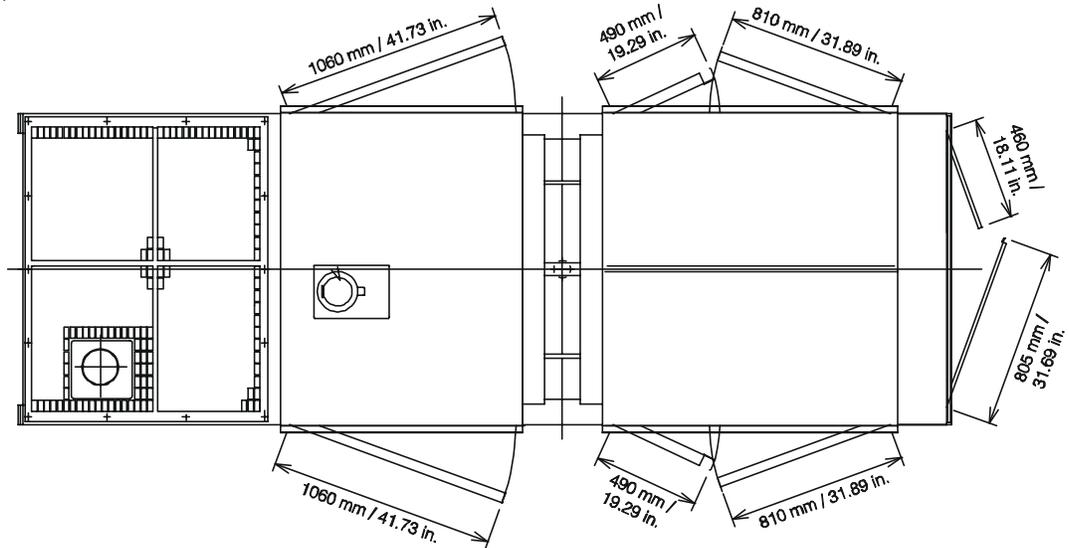
## WhisperWatt™ Generator

### Dimensions



### Weight

|            |                       |
|------------|-----------------------|
| Dry Weight | 11,136 lbs. (5050 kg) |
| Wet Weight | 12,260 lbs. (5560 kg) |



Manufactured by Denyo Co.

Your MQ Power dealer is:



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 CARSON, CA 90749  
 310-537-3700 • 800-883-2551  
 FAX: 310-604-3831  
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 WWW: mqpower.com