



DCA600SSK

WhisperWatt Generator

WhisperWatt™ 600

Prime Rating: 480 kW (600 kVA)

Standby Rating: 528 kW (660 kVA)

60 Hertz



WhisperWatt™ Standard Features

- **Heavy duty, turbocharged, aftercooled, direct injection 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 75 dB(A) at 23 feet. Fully lockable enclosure allows safe unattended operation.
- **Internal fuel tank** with direct reading fuel gauges are standard.
- **Seven-stage powder coat paint** provides durability and weather protection.
- **EPA-MOH emissions certified.**
- **Complete engine analog instrumentation** includes DC ammeter, oil pressure gauge, water temp. 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.
- **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.
- **Simultaneous single and three phase power.**
- **Emergency stop switch**



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Specifications

Generator Specifications

Design	Revolving field, self-ventilated, drip-proof, single bearing
No. of Poles	4-pole
Excitation	Brushless with AVR
Standby Output	528 KW (660 KVA)
Prime Output	480 KW (600 KVA)
Generator RPM	1800
Voltage — 3Ø	208, 220, 240, 416, 440, 480V Reconnectable
Voltage — 1Ø	120, 127, 139, 240, 254, 277V Adjustable
Armature Connection	Star with neutral
Voltage Regulation (No load to full load)	±1.0%
Power Factor	0.8
Frequency	60 Hz
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	75

Engine Specifications

Make / Model	Komatsu / SA6D170AE-1
Emissions	EPA Tier 2 Certified
Starting System	Electric
Design	Direct Injection, Turbocharged, Aftercooled
Displacement	23,150 cc
No. cylinders	6
Bore x Stroke (mm)	170 x 170
Gross Engine Power Output	539 bhp (402 kWm) Standby 490 bhp (365 kWm) Prime
BMEP	257 psi (1773 kPa) 234 psi (1612 kPa)
Piston Speed	2008 ft./min. (10 m/s)
Compression Ratio	14:1
Engine Speed	1800 rpm
Overspeed Limit	2100 rpm
Oil capacity gallons (liters)	16.1 (60.9)
Battery	12V 200Ah x 2 (24V System)

Fuel System

Maximum Fuel Flow (per hour)	Standby: 41 gallons (37 liters)
Maximum Inlet Restriction (Hg)	0.4 in. (9.8 mm)
Maximum Return Restriction (Hg)	3.9 in. (98 mm)
Fuel Tank Capacity	129.5 gallons (490 liters)
Fuel Consumption	
full load gph (lph)	33.9 (128.3)
75% load gph (lph)	26.7 (101.1)
50% load gph (lph)	17.4 (65.9)
25% load gph (lph)	10.6 (40.1)

Cooling System

Fan Load	18.8 hp (14 kW)
Coolant Capacity (with radiator)	29.6 gallons (112 liters)
Coolant Flow Rate (per minute)	197 gallons (744 liters)
Heat Rejection to Coolant (per minute)	Standby: 19715 Btu (20.8 MJ) Prime: 17535 Btu (18.5 MJ)
Heat Radiated to Room (per minute)	Standby: 4151 Btu (4.38 MJ) Prime: 3697 Btu (3.90 MJ)
Maximum Coolant Friction Head	5.0 psi (34 kPa)
Maximum Coolant Static Head	45 feet (14 meters)
Ambient Temperature Rating	95°F (35°C)

Air

Combustion Air	Standby: 1815 cfm (51 m ³ /min) Prime: 1776 cfm (50 m ³ /min)
Maximum Air Cleaner Restriction	30 in. H ₂ O (7.0 kPa)
Alternator Cooling Air	3023 cfm (86 m ³ /min)
Radiator Cooling Air	18891 scfm (535 m ³ /min)
Minimum Air Opening to Room	46 sq.ft (4.26 sq.m)
Minimum Discharge Opening	16.5 sq.ft (1.5 sq.m)

Exhaust System

Gas Flow (full load)	4555 cfm (129 m ³ /min) Standby 4449 cfm (126 m ³ /min) Prime
Gas Temperature	858°F (459°C) Standby 822°F (439°C) Prime
Maximum Back Pressure	40 in. H ₂ O (10 kPa)

Amperage

Rated Voltage	Maximum Amps
1Ø 120 Volt	1333.3 amps (4 wire)
1Ø 240 Volt	666.7 amps (4 wire)
3Ø 240 Volt	1443.4 amps
3Ø 480 Volt	721.7 amps

Warranty*

Komatsu Engine

12 months from date of purchase or 1000 hours (whichever occurs first).

Generator

12 months from date of purchase or 1000 hours (whichever occurs first).

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

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

75.0
DECIBELS

Optional Generator Features

- Battery charger** — provides fully automatic and self-adjusting charging to the generator's battery system.
- Low coolant level shutdown** — provides protection from critically low coolant levels. Includes control panel warning light.
- 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.
- Fuel / water separators** — removes condensation from fuel for extended engine life.
- Trailer mounted package** — highway legal, drop deck, semi-trailer with air brakes. Extra capacity fuel tanks are also available.

Optional Control Features

- Remote speed adjust rheostat** — allows for engine speed adjustment from the control panel.
- 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.

Optional Output Connections

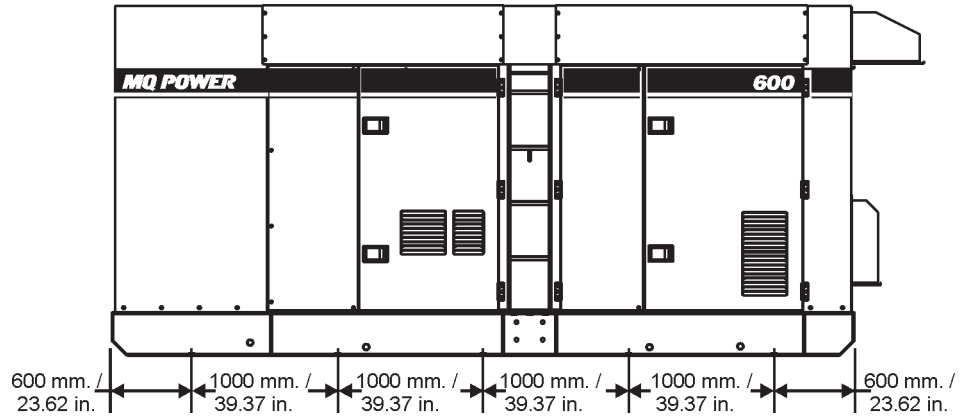
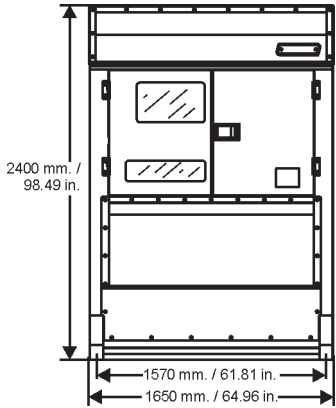
- Pin and Sleeve Connectors** — provides industry standard connectors for all voltage requirements.
- Output cable** — available in any custom length and size configuration.



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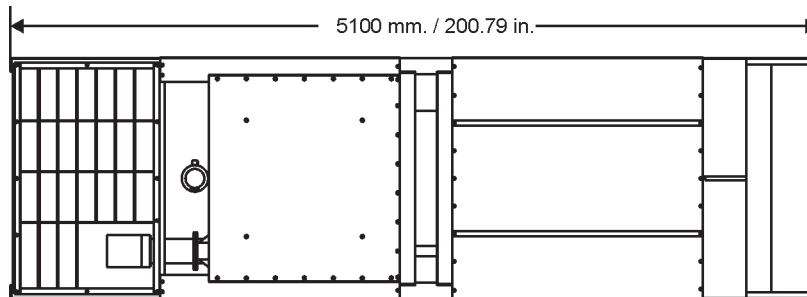
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Dimensions



Weight

Dry Weight	19,553 lbs (8,869 kg)
Wet Weight	21,561 lbs (9,780 kg)



Units mfg. by Denyo Mfg. Corp.

Your MQ Power dealer is:



MQ POWER
POST OFFICE BOX 6254
CARSON, CA 90749
310-537-3700 • 800-421-1244
FAX: 310-632-2656
E-MAIL: mq@multiquip.com
WEBSITE: www.mqpower.com