

DCA800SSK WhisperWattTM Generator

WhisperWatt[™] 800

Prime Rating: 640 kW (800 kVA) Standby Rating: 704 kW (880 kVA)

60 Hertz



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 ±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 73 dB(A) at 23 feet. Fully lockable enclosure allows safe unattended operation.
- Internal fuel tank with direct reading fuel gauges are standard.
- **E-Coat primer** with polyurethane enamel finish coat.
- Simultaneous single and three phase power.
- Low coolant level shutdown system provides protection from critically low coolant levels. Includes control panel warning light.

- 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.
- Emergency stop switch
- Battery switch
- Voltage change over board allows easy to change voltages as your applications require. 240/480 Buss Bar.
- **EPA emissions certified -** Tier 2 emissions compliant.



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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	704 KW (880 KVA)
Prime Output	640 KW (800 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)	±0.5%
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	73

Engine Specifications		
Make / Model	Komatsu / SAA6D170E-3	
Emissions	EPA Tier 2 Certified	
Starting System	Electric	
Design	4-cycle, water-cooled Direct Injection, Turbocharged, Air-to-air Intercooled	
Displacement	23150 cc	
No. cylinders	6	
Bore x Stroke (mm)	170 x 170	
Gross Engine Power Output	1220 hp (909.7 kW)	
BMEP	361 psi (2487 kPa)	
Piston Speed	2008 ft./min. (10.2 m/s)	
Compression Ratio	16.1 : 1	
Engine Speed	1800 rpm	
Overspeed Limit	2100 rpm	
Oil capacity gallons (liters)	37.2 (141.0)	
Battery	12V 200 Ah x 4 (24V system)	

Fuel System		
Maximum Fuel Flow (per hour)	196 gallon	s (740 liters)
Maximum Inlet Restriction (Hg)	4 in. (1	01.6 mm)
Fuel Tank Capacity	129.5 gallo	ns (490 liters)
Fuel Consumption	gph	lph
full load	41.3	156.5
75% load	30.8	116.4
50% load	22.6	85.9
25% load	14.5	54.9

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Cooling System	
Fan Load	49.3 hp (36.8 kW)
Coolant Capacity (with radiator)	40.4 gallons (153.0 liters)
Coolant Flow Rate (per minute)	180 gallons (680 liters)
Heat Rejection to Coolant (per minute)	15277 Btu (16.1 MJ)
Heat Radiated to Engine (per minute)	6700 Btu (6.4 MJ)
Maximum Coolant Friction Head	18.6 psi (265 kPa)
Maximum Coolant Static Head	886 ft (27 meters)
Ambient Temperature Rating	104°F (40°C)

Air	
Combustion Air	2350 cfm (66 m ³ /min)
Maximum Air Cleaner Restriction	30.1 in. H ₂ O (7.5 kPa)
Alternator Cooling Air	3023 cfm (86 m ³ /min)
Radiator Cooling Air	19423 cfm (505 m ³ /min)

Exhaust System	
Gas Flow (full load)	2435 cfm (69 m ³ /min)
Gas Temperature	842°F (450°C)
Maximum Back Pressure	56 in. H ₂ O (14 kPa)

Amperage	
Rated Voltage	Maximum Amps
1Ø 120 Volt	1777.8 Amps (4 wire)
1Ø 240 Volt	888.9 Amps (4 wire)
3Ø 240 Volt	1924.6 Amps
3Ø 480 Volt	962.3 Amps
Main Line Circuit Breaker Rating	2500 Amps
Over Current Relay Trip Set Point	960 Amps

Warranty*

Komatsu Engine

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

Generator

24 months from date of purchase or 2000 hours (whichever occurs first).

Trailer

12 months excluding normal wear items.

 $^{\ast}\text{Refer}$ 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.



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Generator Output Panels



CS-6369 TWIST-LOCK RECEPTACLES (3) 240/139V, 50 AMPS

Optional Generator Features

- □ Battery charger provides fully automatic and selfadjusting charging to the generator's battery system.
- □ Jacket water heater for easy starting in cold weather climates.
- □ Fuel/water separators remove condensation from fuel for extended engine life.
- □ Special batteries long life batteries provide extra engine cranking power.
- □ Spring Isolaters provides extra vibration protection for standby applications.
- □ Trailer mounted package highway legal, drop deck, semi-trailer with air brakes. 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.
- 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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Dimensions





Weight	
Dry Weight	23634 lbs (10720 kg)
Wet Weight	25308 lbs (11479 kg)
Max. Lifting Point Capacity	30000 lbs (13610 kg)



Units manufactured by Denyo 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 POWER E-MAIL: Ingernungup.com WEBSITE: www.mqpower.com