

Welding Generator Diesel Specification

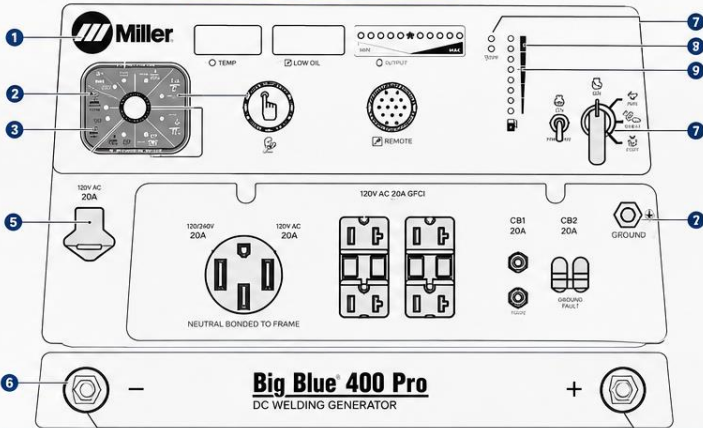
Welding Generator Diesel

WELDING GENERATOR DIESEL SPECIFICATION

DMES-DWG-002



CONTROL PANEL LAYOUT



- | | | |
|------------------------------|----------------------|-------------------------|
| 1 Status / Output Indicators | 4 Start / Preheat | 6 Weld Output Terminals |
| 2 Output Control Selector | 5 120V AC 20A Outlet | 7 Engine Key Switch |
| 3 Welding Process Selector | | 8 Fuel Gauge |
| | | 9 Remote Receptacle |

KEY FEATURES



**VERSATILE
WELDING OUTPUT**
CC/DC, CV/DC
(TIG, STICK, MIG/FCAW)



**HIGH POWER
GENERATOR**
UP TO 12,000 W
PEAK OUTPUT



CATERPILLAR®
C1.5 DIESEL ENGINE
RELIABLE PERFORMANCE
40.2 HP MAX POWER



**LOW FUEL
CONSUMPTION**
PRIME: 1.4 L/H
STANDBY: 1.9 L/H



**COLD START
CAPABILITY**
DOWN TO -20°C
(-4°F)



**BUILT RUGGED
FOR TOUGH
ENVIRONMENTS**



**EPA TIER 4
INTERIM
EMISSIONS
COMPLIANT**

SPECIFICATIONS SUMMARY

Generator Model	BIG BLUE 400 PRO SERIES	Fuel Tank Capacity	43.5 L (11.5 USG)
Generator Serial Number	MF230071E	Fuel Consumption (Prime)	1.4 L/H (0.38 USG)
Engine Type	C15, Min. 27.8 HP / Max. 40.2 HP	Fuel Consumption (Standby)	1.9 L/H (0.51 USG)
Manufacturer	Caterpillar	Dimensions (L x W x H)	2630 x 1430 x 1400 mm (2.63 x 1.43 x 1.40 m)
AC Output (Continuous)	10,000 W		
Peak Output	12,000 W	Dry Weight (Engine Only)	345 lbs (157 kg)
Weld Output Range	14 – 400 A	Gross Weight	1024 kg (2252.8 lbs)

Welding Generator Diesel Specification

Welding Generator Diesel

Specifications

Item	Value
Generator Model	BIG BLUE 400 PRO SERIES
Generator Serial Number	MF230071E
Engine Type	C1.5, Min. 27.8 HP / Max. 40.2 HP
Engine Serial Number	G7P14273
Manufacturer	Caterpillar

C1.5 Standard Equipment

Air Inlet System

Low oil carry over compression rings.

Control System

Alternator 12-Volt 65 amp.

Starter motor 12-volt.

Glow plug starting aid.

Cooling System

Belt-driven coolant pump.

Coolant temperature switch.

Choice of cooling fans.

Naturally Aspirated: SAE No. 7½ flywheel.

Turbo-charged: SAE No. 6½ or SAE No. 7½ flywheel.



Welding Generator Diesel Specification

C1.5 Standard Equipment

Flywheel & Flywheel Housing

Naturally Aspirated: Choice of SAE No. 4 or standard backplate flywheel housing.

Turbo-charged: Choice of SAE No. 4 or SAE No. 5 or standard backplate flywheel housing.

Fuel System

Fuel injection pump.

Spin-on fuel filter.

Electronic Shut-off Solenoid (ESOS).

Lube System

Alternative oil filters.

Spin-on lube oil filter.

Lube oil pressure switch.

Lube oil sump.

General

Cast iron engine block.

Cast iron exhaust manifold-side outlet.

Cold start capability to -20°C (-4°F).

Gradeability 35° continuous.

Paint: Caterpillar yellow, with optional colors.



Welding Generator Diesel Specification

Welding Output

Weld Mode / Process, Weld Output Range & Rated Output at 100% Duty Cycle at 104°F (40°C)

Item	Value
Panel Type	ROHS 400 PRO W / VRD
DC Voltage	12 Volts

CC/DC (TIG)

20–400 A

300 A at 32 VDC

85 VDC / 30 VDC

350 A at 27 VDC

400 A at 24 VDC

CC/DC (Stick)

20–400 A

300 A at 32 VDC

85 VDC / 30 VDC

350 A at 27 VDC

400 A at 24 VDC

CV/DC (FCAW / MIG)

14–40 A

300 A at 32 VDC

85 VDC / 30 VDC

350 A at 27 VDC

400 A at 24 VDC

Welding Generator Diesel Specification

Welding Generator Diesel

Generator Output

Item	Value
Peak Output	12,000 Watts
Continuous Output	10,000 Watts
AC Supply	1-phase, 84/42 A, 120/240 VAC, 60 Hz

Fuel

Item	Value
Fuel Tank Capacity	43.5 Liters (11.5 USG)
Fuel Consumption (Prime)	1.4 Liters (0.38 USG)
Fuel Consumption (Standby)	1.9 Liters (0.51 USG)

Engine Specification

Item	Value
Maximum Power	40.2 hp
Maximum Torque	83 lb-ft @ 1800 rpm
Rated Speed	2200–3000 rpm
Minimum Power	27.8 hp

Emission Standards

Item	Value
Emissions	U.S. EPA Tier 4 Interim Equivalent

Welding Generator Diesel Specification

Welding Generator Diesel

Engine General

Item	Value
Engine Configuration	Inline 3, 4-Stroke-Cycle Diesel
Bore	3.3 in
Stroke	3.5 in
Displacement	91 in ³
Compression Ratio	22.5 : 1
Aspiration	Naturally Aspirated (NA) or Turbocharged (T)
Combustion System	Indirect Injection
Rotation from Flywheel End Aftertreatment	Counterclockwise

Engine Dimensions (Approximate)

Item	Value
Length	22.5 in
Width	20.3 in
Height	25.3 in
Weight (Dry, Basic Operating Engine Without Optional Attachments)	345 lbs

Welding Generator Diesel Specification

Welding Generator Diesel

Rigging

Item	Value
Lifting Points	Single Points on Frame Top
Lifting Eye Thickness	12.0 mm Round Bar
Pad Eye Hole Diameter	100.0 sq mm

Overall Dimensions

Item	Value
Overall Length	2630 mm (2.63 Meter)
Overall Width	1430 mm (1.43 Meter)
Overall Height	1400 mm (1.40 Meter)
Gross Weight	1024 Kg (2252.8 lbs)