

shindaiwa[®]

SPECIFICATIONS

DGA50C

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CHAPTER 1: GENERAL

1. Standards

Design and production are in conformity with:

- (1) Japan Industrial Standards: JIS C 9300-1
- (2) Low Noise Type Construction Machinery Standard
- (3) Voluntary Emission Regulations for non-road engines in Japan by LEMA. (Tier 2)

*LEMA stands of Japan Engine Manufacturers Association

2. Design Conditions

- (1) Installation Place: Outside Only.
- (2) Ambient Temperature: -15 to +40°C
- (3) Humidity: Less than 80%
- (4) Altitude: Less than 300 meters above sea level

3. Test and Check

Test shall be done with a complete workable unit of the diesel engine unit.

Check Items:

- (1) Insulation and Dielectric Test
- (2) Starting
- (3) Protection Device Working Test
- (4) Voltage Deviation and Speed Variation: 0-4/4 Load
- (5) Load Test: Welding and Generating 4/4 Load

4. Painting

Painting and color specifications are as per manufacturer's standard.

5. Structure

- (1) Bed and Vibration Proof Device
Alternator is directly coupled with engine and both are installed on the bed through the vibration proof device.
- (2) Low Noise
Low noise structure is put in the inside of the bonnet.
Sound Level: 57dB(A) @7m distance under no load.
- (3) Fuel Tank
A steel fuel tank is equipped and incorporated with the electrical level gauge.

CHAPTER 2: SPECIFICATIONS

	Unit	DGA50C	
Generator	Generating Method	- Rotating Filed, Brushless 3-Phase Synchronous Generator	
	Rated Output	kVA	50
		kW	40
	Rated Voltage	V	415
	Rated Current	A	69.6
	Rated Frequency	Hz	50
	Rated Speed	min ⁻¹	1500
	Phase & Wiring	-	3-Phase 3-Wire
	Power Factor	%	80
	Insulation Class	-	Alternator: F Exciter: B
	Exciting Method	-	Self Excitation(Brushless)
Poles	-	4	
Engine	Method	-	Vertical, Water-cooled 4-Cycle, Diesel Engine
	Model No.	-	Isuzu BB-4BG1T
	Cylinder-bore x stroke	mm	4-105 x 125
	Continuous Rated Output	kW{PS}	48.5{66.0}
	Speed	min ⁻¹	1500
	Displacement	L	4.329
	Combustion Method	-	Direct Injection(Turbo-charged)
	Cooling Method	-	Water-cooling radiator
	Lubricating	-	Trochoid pump, force-feed lubrication
	Starting	-	Starter Motor
	Fuel	-	Diesel
	Oil	-	SAE Class CD or higher
	Fuel Tank Capacity	L	160
	Lubricant Volume	L	13.2(including filter 1.1 L)
	Coolant Volume	L	17(including sub-tank 1.5 L)
	Starter Motor Cap.	V-kW	24 - 4.5
	Alternator Cap.	V-A	24 - 20
Battery	-	95D31R x 2	
Dimension	Length	mm	2000
	Width	mm	950
	Height	mm	1430
	Dry Weight	kg	1431
	Installed Weight	kg	1590

Specifications subject to change without notice.

CHAPTER 3: EQUIPMENT AND FEATURE

1. Equipment

(1) Generator	
Voltage Meter	1 pc.
AC Ampere Meter.....	1 pc.
Frequency Meter	1 pc.
1-phase Receptacle (15A).....	3 pc.
3-phase Receptacle (20A).....	1 pc.
3-phase Receptacle (32A).....	1 pc.
3-phase Receptacle (50A).....	1 pc.
Main Circuit Breaker	1 pc.
1-phase Breaker (15A)	3 pcs.
3-phase Breaker (20A).....	3 pcs.
3-phase Breaker (32A).....	3 pcs.
3-phase Breaker (50A).....	3 pcs.
1-Phase Earth Leakage Circuit Breaker (ELCB).....	3 pcs.
3-Phase Earth Leakage Circuit Breaker (ELCB).....	3 pcs.
(2) Safety Device	
Emergency Stop Switch.....	1 pc.
Battery Isolator Switch	1 pc.
(3) Other	
Volt Meter Selector Switch	1 pc.
Ampere Meter Selector Switch	1 pc.
Voltage Regulator	1 pc.
Water Temp. Gauge	1 pc.
Oil Pressure Gauge	1 pc.
Fuel Gauge	1 pc.
Hour Meter.....	1 pc.
Grounding Terminal & Grounding Rod	1 set
Monitor Lamp.....	1 set
• Water Temp.	
• Battery Charge	
• Oil Pressure	

2. Feature

(1) Feature

- Sound Level 57dB(A) at 7m distance under no load.
- Generating Performance 1-phase & 3-phase
- Environmental EPA Emission Compliance Level and Low Noise Level
- Fuel Tank Capacity 160 Liters
- Dry Weight 1431 kg
- Dimensions (LxWxH) 2000 x 950 x 1430 mm

(2) Protection Device

Item	Set Value	Engine Shut-Down
Water Temp.	105°C	○
Battery Charge	-	-
Oil Pressure	98kPa	○

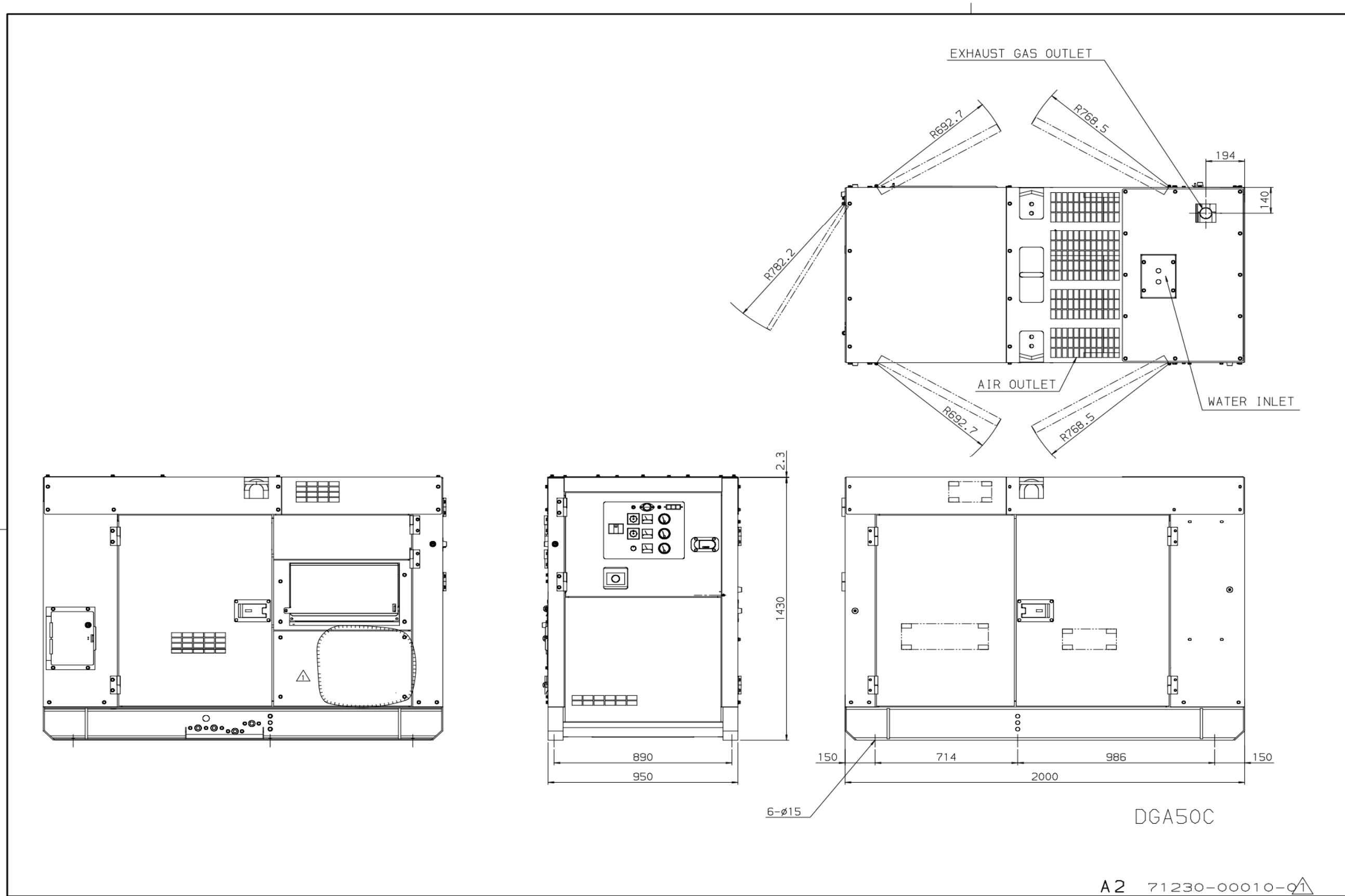
(3) Fuel Economy

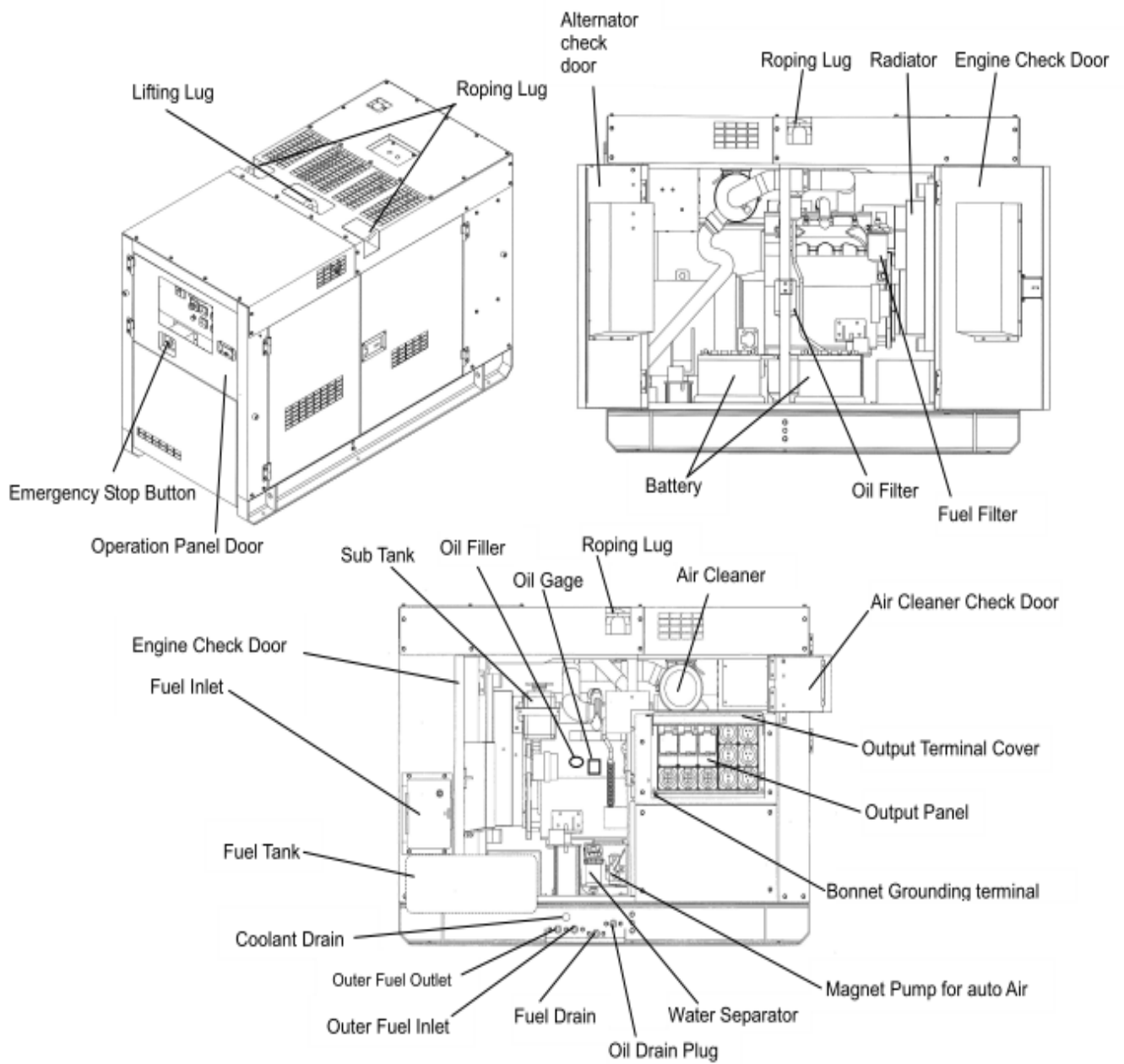
Load	Fuel Consumption
Full load	11.8 Liters/hr. (3.1 Gallons/hr.)
3/4 load	8.3 Liters/hr. (2.2 Gallons/hr.)
1/2 load	5.9 Liters/hr. (1.6 Gallons/hr.)
1/4 load	3.0 Liters/hr. (0.8 Gallons/hr.)

(3) Accessories

Owner's & Operator's Manual	1 copy
Starter Key	1 set
Adaptor	2 pcs.
Fuse	2 pcs.

CHAPTER 4: APPEARANCE





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