

shindaiwa®

SPECIFICATIONS

Diesel Engine Generator **DG25MK-400**

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CHAPTER 1: GENERAL

1. Standard

Design and production are in conformity with:

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

*MLIT : Ministry of Land, Infrastructure, Transport and Tourism.

2. Design Condition

- (1) Installation Place: Outside Only.
- (2) Ambient Temperature: 5 to 104° F (-15 to 40°C)
- (3) Humidity: Less than 80%
- (4) Altitude: Less than 984 ft. (300 m) above sea level

3. Test and Check

Test shall be conducted 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: 58 dB(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

Model		Unit	DG25MK-400	
Alternator	Generating Type	-	Rotating Feld, Brushless 3-Phase Synchronous Alternator	
	Rated Frequency	Hz	50	60
	Rated Output	kVA	20	25
		kW	16	20
	Rated Voltage	V	400 [200] *1	440 [220] *1
	Rated Current	A	28.9 [57.7] *1	32.8 [65.6] *1
	Winding	-	3-phase, 4-wire	
	Power factor	%	80	
	Insulation class	-	F	
	Excitation	-	Self-Excitation(Brushless)	
No. of poles	-	4		
Engine	Types	-	Vertical Water-Cooled 4-cycle Diesel Engine	
	Model (Manufacturer)	-	V2403 (KUBOTA)	
	No. of Cylinders (bore x stroke)	mm	4 (87 X 102.4)	
	Continuous rated output	kW	19.1	23.7
		PS	26.0	32.2
	Rated speed	min ⁻¹	1500	1800
	Displacement	L	2.434	
	Combustion system	-	Direct Fuel Injection	
	Cooling method	-	Radiator	
	Lubricating method	-	Forced lubrication	
	Starting method	-	Electric start	
	Fuel	-	Diesel Fuel (ASTM No. 2-D)	
	Lubricant oil	-	CD class	
	Fuel tank capacity	L	65	
	Lubricant volume (Full)	L	9.7	
	Cooling water volume	L	9.7	
	Starting motor capacity	V-kW	12 - 1.4	
Charging dynamo capacity	V-A	12 - 30		
Battery	-	80D26R		
Unit	Length	mm	1500	
	Width	mm	700	
	Height	mm	1000	
	Dry Weight	kg	625	
	Installed Weight	kg	705	

*Specifications are subject to change without notice.

CHAPTER 3: EQUIPMENT AND FEATURE

1. Equipment

(1) Generator

Voltage Meter	1 pc.
Ampere Meter	1 pc.
Frequency Meter	1 pc.

(2) Safety Device

Circuit Breaker - with leakage shut off device	1 pc.
Earth Leakage Relay	1 pc.
Spill Containment	1 pc.

Protective Monitor	1 set
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- Battery Charge (with auto engine shutdown feature)
- Oil Pressure (with auto engine shutdown feature)
- Over Speed (with auto engine shutdown feature)
- Water Temp. (with auto engine shutdown feature)
- Air Filter
- Water Separator

Fuel Cover (w/ locking feature)	1 pc.
Panel//Right "Keyed" Doors	1 pc. ea.

Automatic Shut-Down Feature (when some protective problems are detected.)

(3) Equipment

Fuel Meter	1 pc.
Water Temp. Meter	1 pc.
Monitor Lamp	1 set
Over Load Pre-caution Lamp	1 pc.
Preheat Lamp	1 pc.
Throttle Switch	1 pc.
Starter Switch	1 pc.
Frequency Selector Switch	1 pc.
400/440V Output Lamp	1 pc.
Fuel Tank	1 pc.
Fuel Filter (w/ fuel strainer)	1 pc.
Air Cleaner	1 pc.
Fuel Drain Plug	1 pc.
Oil Drain Plug	1 pc.
Cooling Water Drain Plug	1 pc.
Hour Meter	1 pc.
Pilot Lamp	1 pc.
Low Noise Air Flow System	

2. Feature

(1) Feature

- Sound Level 58B(A) at 7m distance under no load.
- Generating Performance 3-Phase
- 2 Way Drive Control High/Low Speed
- Environmental Quiet Sound System
- Fuel Tank Capacity 17 gal. (65 Liters)
- Dry Weight 1378 lbs. (625 kg)
- Dimensions (LxWxH) 59.05" x 27.6" x 39.37" (1500 x 700 x 1000 mm)

(2) Protection Device

Item	Set Value	Engine Shut-Down
Water Temp.	239° F/115°C	✓
Low Battery Charge	n/a	✓
Low Oil Pressure	7 psi/49kPa	✓
Air Filter	when clogged	No
Over Speed	2070 min ⁻¹	✓
Over Load	Approx. 80% of Rated Output	No

(3) Fuel Economy

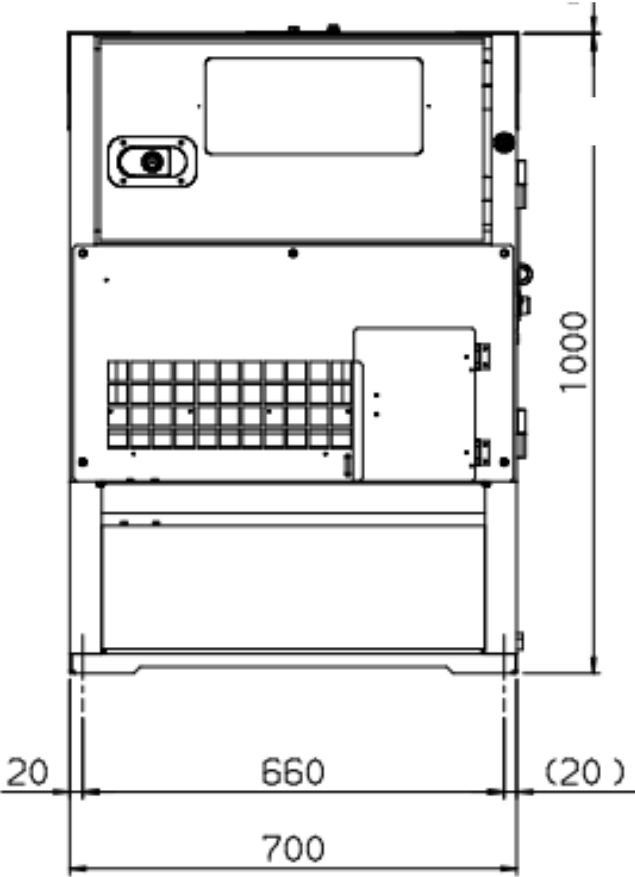
Criteria	Fuel Consumption
Full load	2.35 gal./hr (8.9L/hr.)
3/4 load	1.35gal./hr (5.1L/hr.)
1/2 load	1.03gal./hr (3.9L/hr.)
1/4 load	.58 gal./hr. (2.2L/hr.)
No Load	N/A

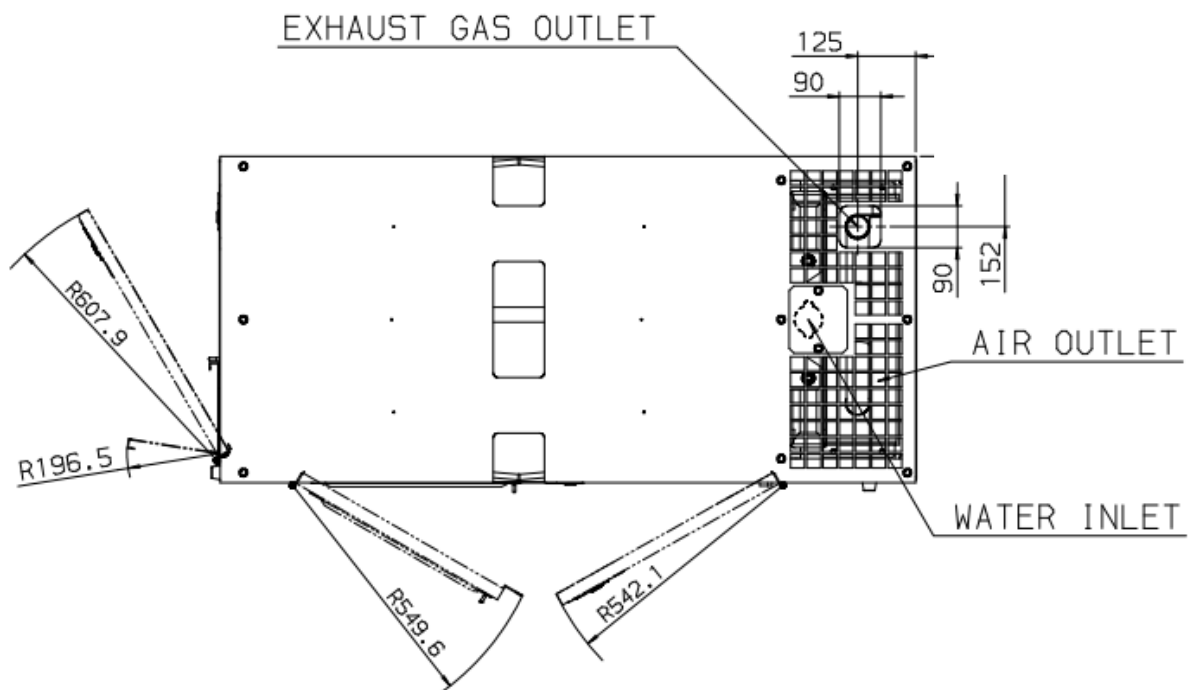
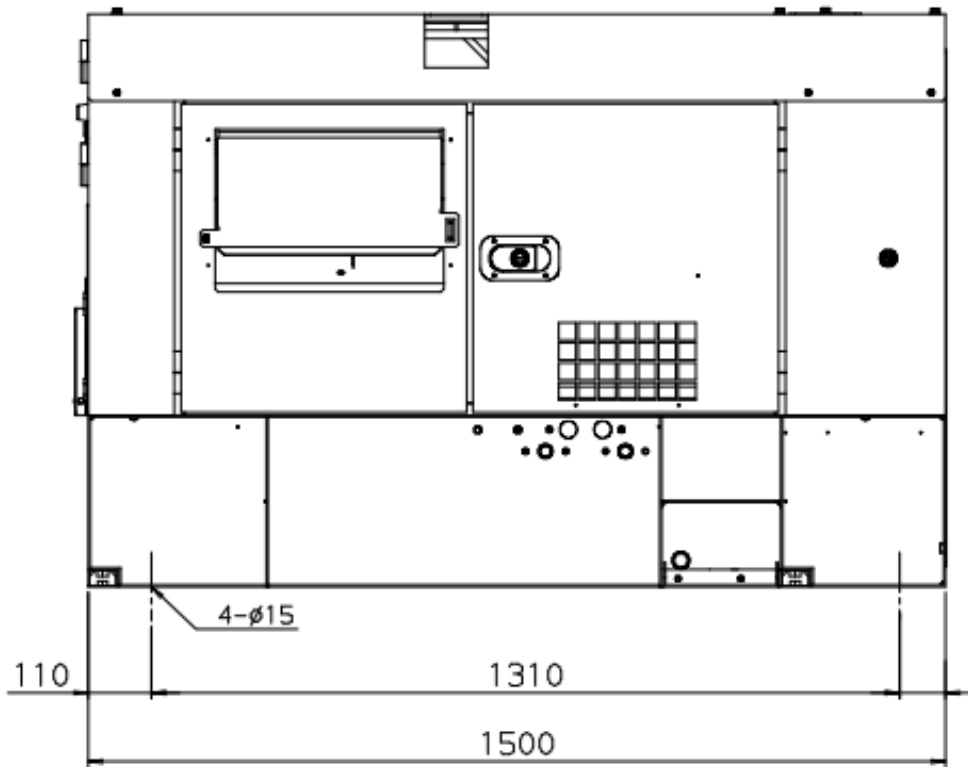
*Above is for reference only.

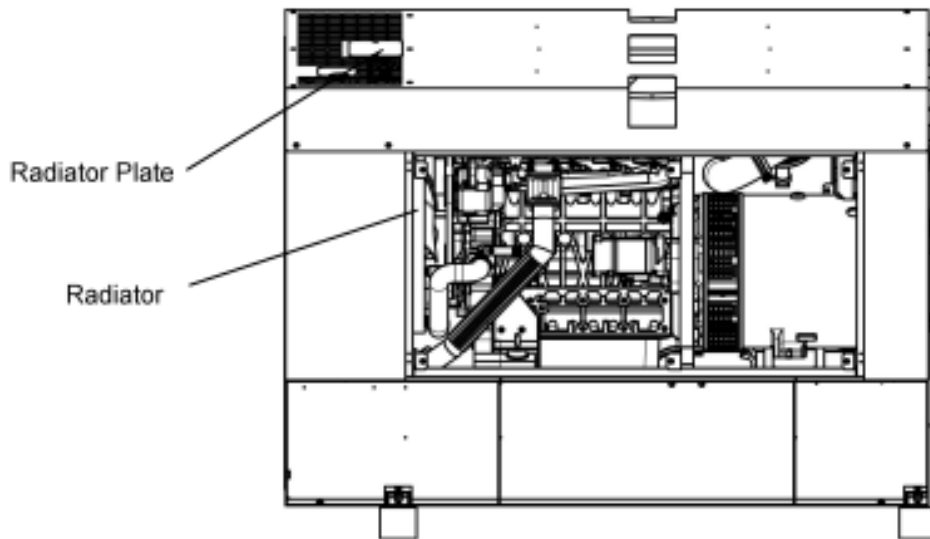
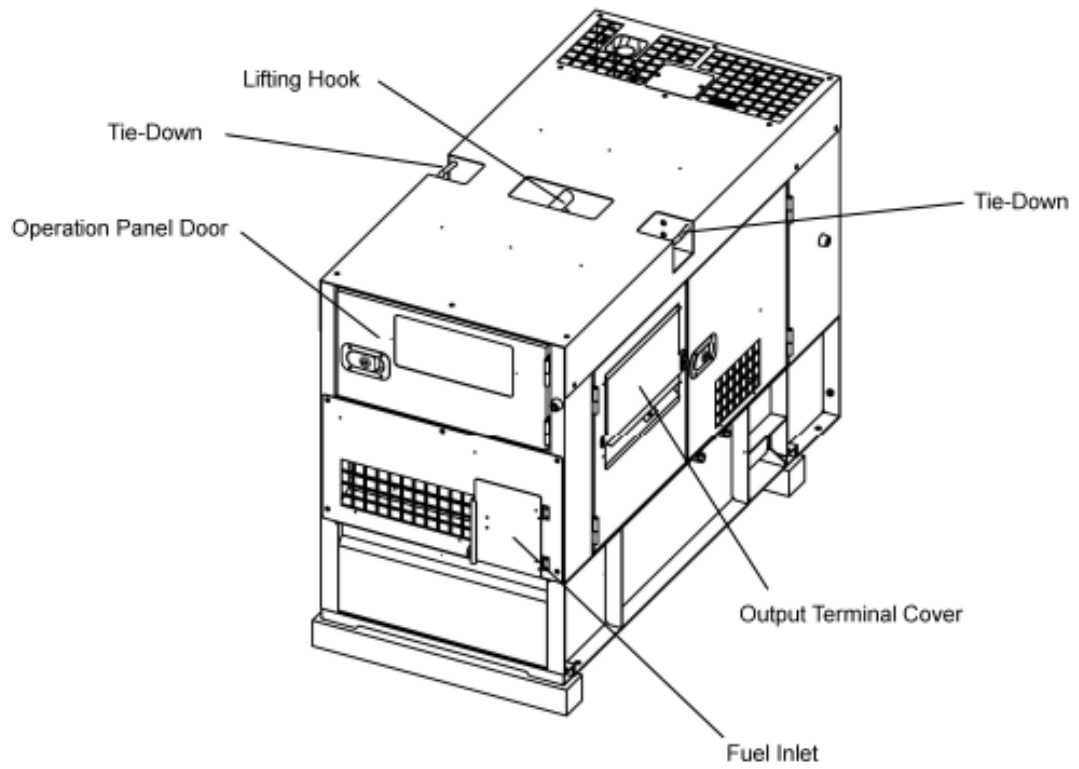
(4) Accessory

Operator's Manual	1 copy
Starter Key	2 pcs.
Door Key	2 pcs.
Grounding Rod	1 set

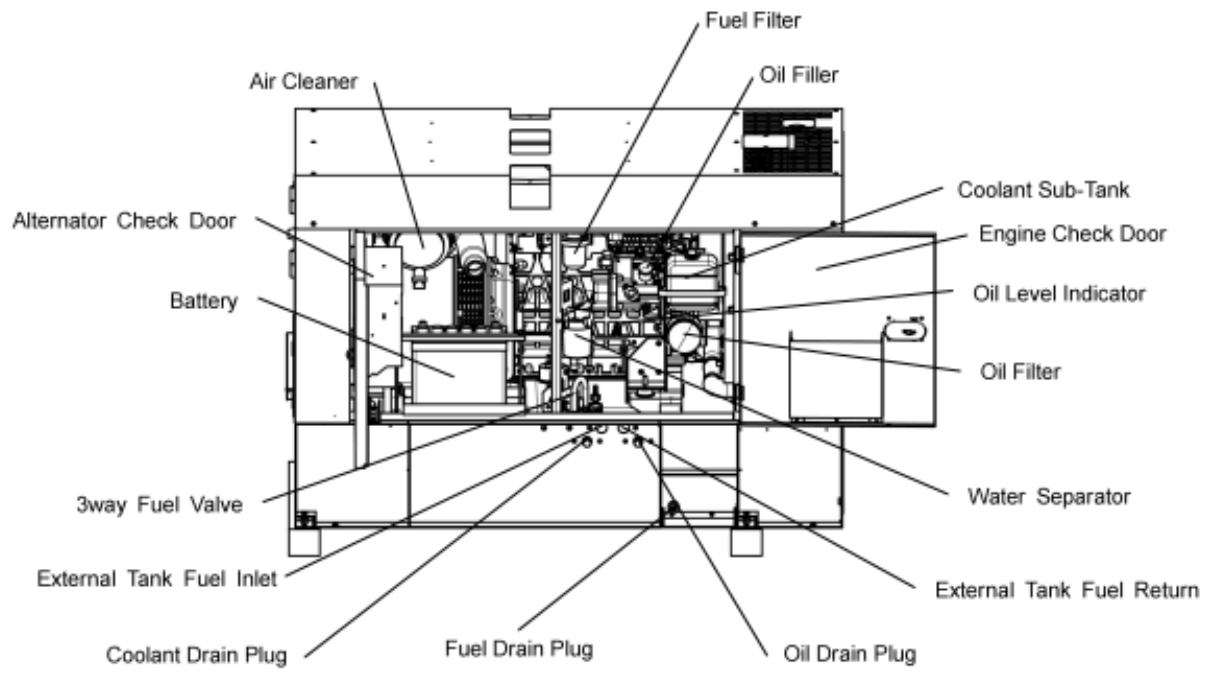
CHAPTER 4: APPEARANCE







* Shown with side-plate removed.



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