

**shindaiwa®**

# **SPECIFICATIONS**

## **DGM60MK/LU**

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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 by Ministry of Construction
- (3) Construction Machinery Gas Emission Regulation Standard by Ministry of Construction
- (4) US Emission Protection Agency (EPA)

## **2. Design Conditions**

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

## **3. Test and Check**

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

- (1) Check Items
  - a) Insulation and Dielectric Test
  - b) Starting
  - c) Protection Device Working Test
  - d) Voltage Deviation and Speed Variation: 0-4/4 Load
  - e) Load Test: Welding and Generating 4/4 Load

## **4. Painting**

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

## **5. Structure**

- (1) 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: 60dB(A) @7m distance
- (3) Fuel Tank  
A steel fuel tank is equipped with a spill containment capability and incorporated with the electrical level gauge.

## CHAPTER 2: SPECIFICATIONS

Model		Unit		DGM60MK/LU
Alternator	Generator Type	-		Revolving Field Brushless AC Simultaneous 3 Phase-120V/240V 1 Phase
	Rated Frequency	Hz		60
	Rated Output	Three phase	kVA	60
			kW	48
		Single phase	kVA	36/ [18] *1
			kW	36/ [18] *1
	Rated Voltage	Three phase	V	208/240/ [480] *1
		Single phase	V	120/139/240/[277] *1
	Rated Current	Three phase-208V	A	144
		Three phase-240V	A	144
		Three phase-480V	A	72
		Single phase-120V	A	150×2 [75 x 2]*1
Single phase-240V		A	150 [75]*1	
Power Factor	-		Three phase 0.8, Single phase 1.0	
Insulation class	-		F	
Excitation	-		Self Excitation (brushless)	
No. of Poles	-		4	
Engine	Type	-		Vertical Water-Cooled 4-Cycle Diesel
	Model(Manufacturer)	-		Kubota V3800DI-TI
	No. of Cylinders (bore × stroke)	(in./mm)		4 (3.94×4.72/100×120)
	Continuous Rated Output	hp		77
	Rated Speed	rpm		1800
	Displacement	Cu.in./liters		230/3.769
	Combustion System	-		Direct Injection (Turbo-charged)
	Cooling Method	-		Radiator
	Lubricating Method	-		Forced Lubrication
	Starting Method	-		Electric
	Fuel	-		No. 2-D EPA regulation
	Lubricating Oil	-		CF class or higher
	Fuel Tank Capacity	gal./liters		111/420
	Lubricant Volume	gal./liters		3.5/13.2 (including filter 0.1/0.4)
	Cooling Water Volume	gal./liters		3.3/12.5 (including sub-tank 0.4/1.6)
	Starting Motor Capacity	V-kW		12-3.0
	Charging Alternator Capacity	V-W		12-960
Battery Capacity	-		12V-92AH	
Unit	Length	in./mm		78/1970
	Width	in./mm		35/880
	Height	in./mm		64/1630
	Dry Weight	lbs./kg		2843/1290
	Installed Weight	lbs./kg		3703/1680

Note:

1. Specifications subject to change without notice.
2. Voltage for 60Hz only.

# CHAPTER 3: EQUIPMENT AND FEATURE

## 1. Equipment

(1) Generator  
Digital Display .....2 pieces  
• Voltage Output (Single & Three Phase)  
• Remaining Quantity of Fuel

Breaker .....2 pieces  
With Leakage Shut off Device: 30mA 0.1 second

Voltage Regulator ..... 1 piece

(2) Monitor Lamp ..... 1 set

- Battery Charge
- Oil Pressure
- Water Temperature
- Over Speed
- Air Filter
- Spill Container
- Overheat

## 2. Feature

(1) Feature

- Simulphase™ Supply dual voltage (single & 3 phase) simultaneously.
- Sound Level 60dB(A) at Eco mode
- Environmental Tier 4 Engine, Complies with EPA 3
- Large Fuel Tank 420 Liters Fuel Tank Standard, spill containment
- Dry Weight 1290kg
- Dimensions (LxWxH) 1970 x 880x 1630 mm

(2) Protection Device

Item	Standard	Monitor Lamp	Breaker Trip	Engine Shut-Down
High Water Temp.	110°C	○	-	○
Low Oil Pressure	98 kPA	○	-	○
Insufficient Battery Charge	Below 8V	○	-	○
Over Speed	*1	○	-	○
Air Filter Clogging	-	○	-	-
Spill Containment	37.8L	○	-	-
Engine Malfunction	*2	○	-	(○)

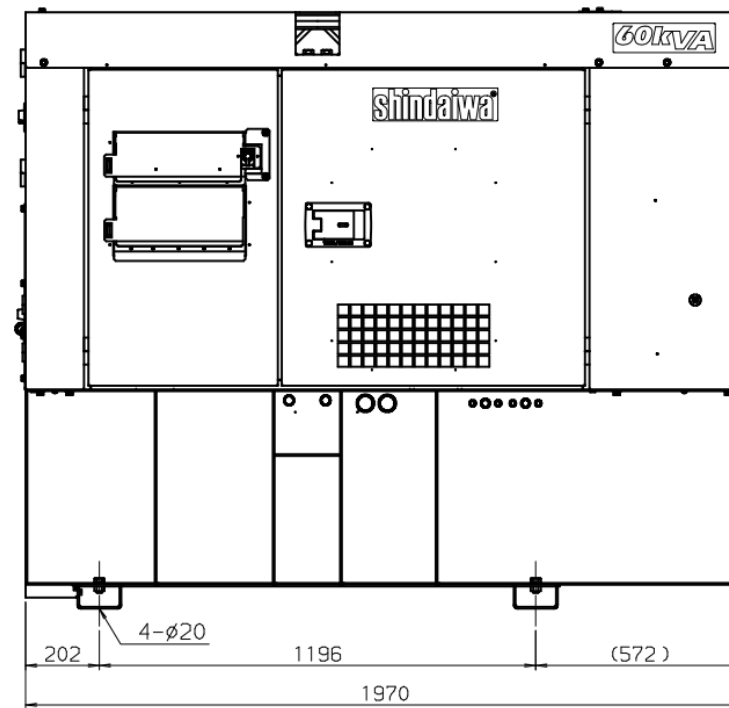
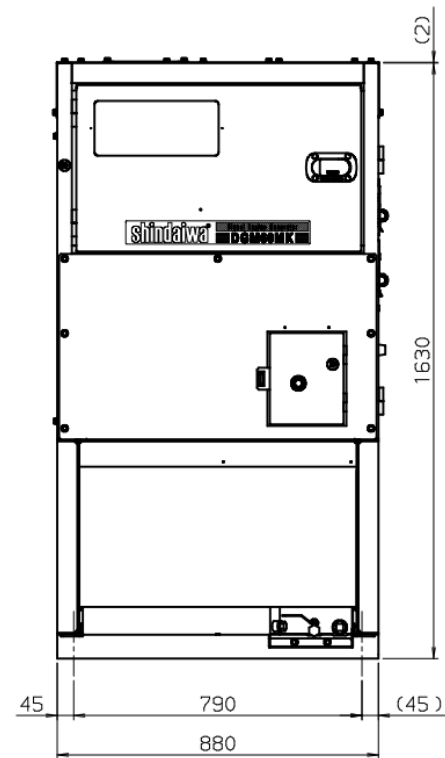
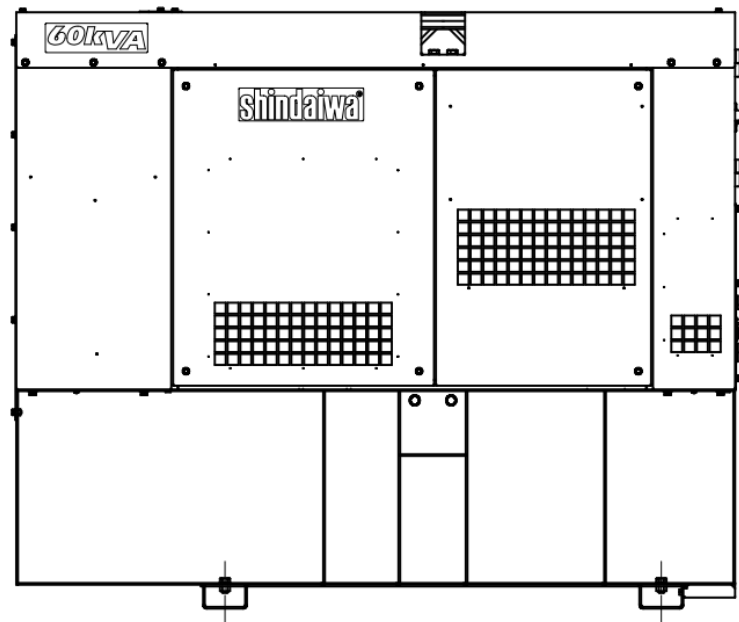
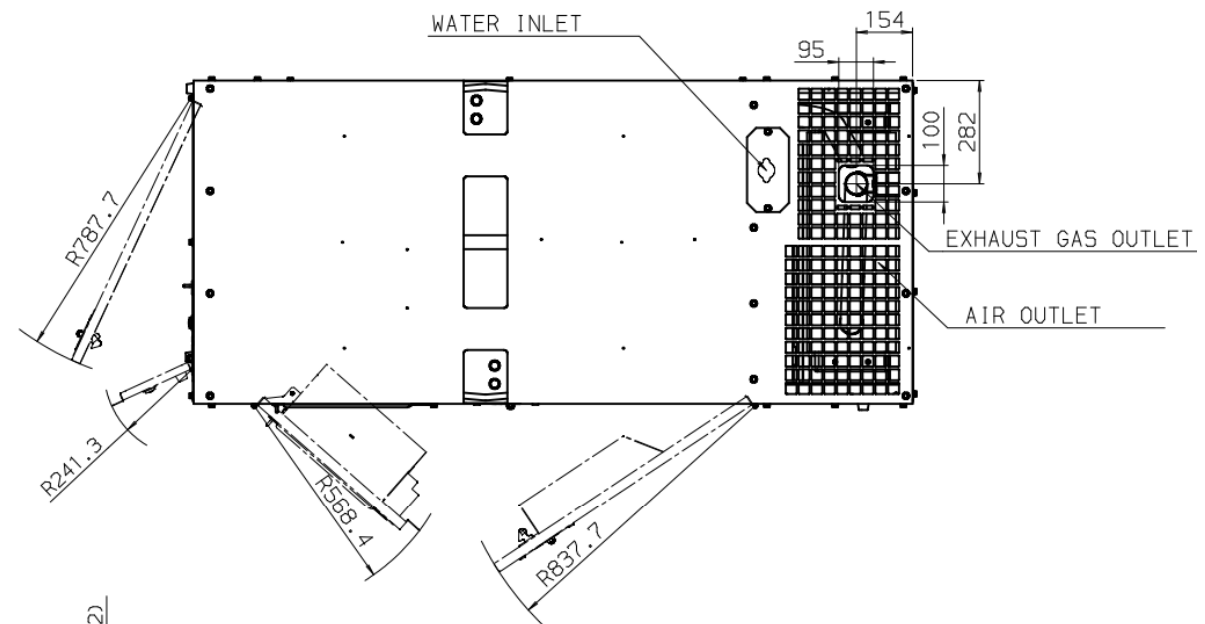
\*1: 115% of the rated engine speed

\*2: Includes water temp, oil pressure, battery voltage, engine speed.

(3) Accessories

Owner's & Operator's Manual	1 copy
Emission Control Systems Limited	1 copy
Warranty (by engine manufacturer)	

# CHAPTER 4: APPEARANCE



A2(1/1):

DGM60MK-LU  
G0038013000

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