

**shindaiwa®**

# **SPECIFICATIONS**

## **DGK100D**

# **CONTENTS**

## **CHAPTER 1: GENERAL.....1**

- 1. Standards**
- 2. Design Conditions**
- 3. Test and Check**
- 4. Painting**
- 5. Structure**

## **CHAPTER 2: SPECIFICATIONS.....2**

## **CHAPTER 3: EQUIPMENT AND FEATURE.....3**

- 1. Equipment**
  - (1) Generator**
  - (2) Welder**
  - (3) Others**
- 2. Feature**
  - (1) Feature**
  - (2) Protection Device.....4**
  - (3) Accessories**

## **CHAPTER 4: APPEARANCE.....5**

# **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) EPA Tier 3 Emission level

## **2. Design Conditions**

- (1) Installation Place: Outside
- (2) Ambient Temperature: -15 to +40°C
- (3) Humidity: Less than 85%
- (4) Altitude: Less than 1000 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) 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: 58dB(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	DGK100D
Generator	Generating Method		-	Revolving Filed, Brushless AC 3-Phase-120/240V, 1 Phase
	Rated Output		kVA/kW	100/80
			kW	80
	Rated Voltage	3-Phase	V	208, 240, 480
		1-Phase		120, 139, 240, 277
	Rated Current	1 Phase-120V	A	242 x 2 (Zigzag)
		1-Phase-240V		242 (Zigzag)
		3-Phase-240V		241
		3-Phase-480V		120
	Rated Frequency		Hz	60/50 ( $\pm$ less than 0.25%)
	Rated Speed		min <sup>-1</sup>	1800/1500
	Winding		-	Star with Neutral
	Power Factor		%	80
Insulation Class		-	Alternator: F	
Exciting Method		-	Self-Excitation (Brushless)	
No. of Poles		-	4	
Engine	Method		-	Vertical, Water-cooled 4-Cycle, Diesel Engine
	Model No.		-	ISUZU BI-4HK1
	No. of Cylinder (bore x stroke)		In./mm	4 (4.53 x 4.92/115 x 125)
	Continuous Rated Output		kW{PS}	114.7{155.1}/1800 min <sup>-1</sup>
	Rated Speed		min <sup>-1</sup>	1800/1500
	Displacement		Liter	5,193
	Combustion System		-	Direct Injection, Turbo-charged, Inter-cooler
	Cooling Method		-	Water-cooling radiator
	Lubricating		-	Forced lubrication
	Starting		-	Electric
	Fuel		-	AST No.2 Diesel
	Fuel Consumption		Liter	23.4/h (@full load)
	Lubricating Oil		-	SAE Class CD or higher
	Fuel Tank Capacity		Liter	222
	Lubricant Volume		Liter	22
	Coolant Volume		Liter	23
	Starting Motor Capacity		V-kW	12V – 2.5kW
Alternator Capacity		V-A	12V – 110A	
Battery Capacity		V-AH	12V – 150AH	
L x W x H		in/mm	102x49x71/2590x1240x1800	
Dry Weight		lbs./kg	4564/2070	

\*Specifications subject to change without notice.

# CHAPTER 3: EQUIPMENT AND FEATURE

## 1. Equipment

### (1) Generator

Voltage Meter .....	1 pc.
Amp. Meter .....	1 pc.
Freq. Meter .....	1 pc.
Volt Meter Selector.....	1 pc.
Amp. Meter Selector .....	1 pc.
Breaker:	
●Main Circuit Breaker.....	1 pc.
●Circuit Breaker (1-phase) .....	2 pcs.
●Circuit Breaker (3-phase) .....	3 pcs.
GFCI Receptacle (20A).....	2 pcs.
Twist & Lock Type Receptacle (50A) .....	1 pc.

### (2) Others

Idle Control Switch .....	1 pc
Starter Switch .....	1 pc.
Monitor Lamp .....	1 set
• Diagnosis	
• Air Filter	
• Boost	
• Battery Charge	
• Oil Pressure	
• Over Heat	
• Over Speed	

## 2. Feature

### (1) Feature

• Sound Level	58B(A) at 7m distance under no load
• Generating Performance	Single Phase & Three Phase
• 2 Way Drive Control	High/Auto
• Environmental	EPA Emission 3 Compliance and Low Noise Level
• Fuel Tank Capacity	222 Liters
• Dry Weight	2070 kg
• Dimensions (LxWxH)	2590 x 1240 x 1800 mm

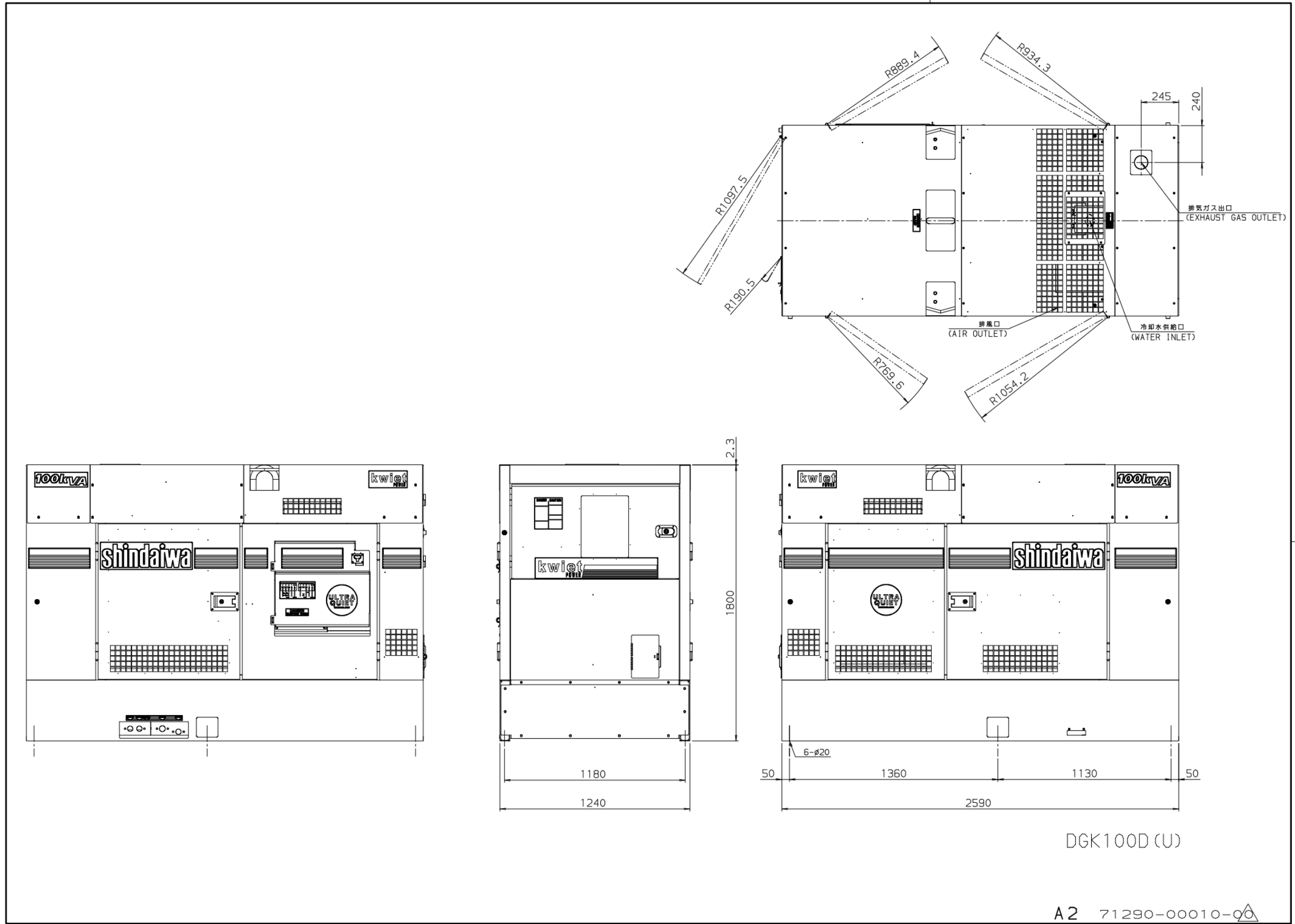
(2) Protection Device

Item	Set Value	Monitor Lamp	Engine Shut-Down
Diagnosis		○	-
Boost Temp.	85°C	○	-
Over Speed	2070min <sup>-1</sup>	○	-
Air Filter	when clogged	○	-
Over Heat	105°C	○	○
Battery Charge	-	○	
Oil Pressure	100kPa	○	○

(3)Accessories

Owner's & Operator's Manual	1 copy
Engine Instruction Manual	1 copy
Tool Set	1 set
• Spanner	3 pcs
• Screw Driver	1 pc
• Plug Wrench	1 pc
Starter Key	1 set

# CHAPTER 4: APPEARANCE



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