

Quiet, versatile, and powerful.

- Fuel-efficient Isuzu engine
- Provides both single and three-phase output
- Ultra Quiet Technology
- ESI-exclusive Re-Air option regulates airflow to maintain constant temperature within the enclosure



**SERVO
CONTROLLED**

BUILT ARCTIC TOUGH

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Features & benefits

- Rugged, fuel-efficient Isuzu diesel engine
- 58.6 gallon fuel capacity
- Ultra Quiet Technology for class-leading sound level reduction
- Lightweight and compact to fit into tight spaces
- Connects easily and is simple to operate
- Two-way tank valve for easy connection with auxiliary tanks
- Voltage selector permits matching output to load
- Lockable switch protects against improper voltage change
- Provides both single and three-phase output
- Low oil pressure and high coolant temperature result in automatic shut-down
- Durable all-weather outer enclosure with powder coated exterior and stainless steel fasteners

Available mounting

- Skid mounted (standard)
- Trailer mounted

Options

- ESI-exclusive Re-Air attachment regulates airflow to maintain a constant temperature within the enclosure



Specifications

Generator type	Revolving field brushless AC 3 Phase-120/240V Single Phase
Frequency	60 Hz
Output	Three-phase: 100 kVA / 80 kW Single-phase: 58 kW
Voltage	Three-phase: 208, 240, 480 V Single-phase: 120, 139, 240, 277 V
Current	Three-phase 240V: 241A Three-phase 480V: 120A Single-phase 120V: 242 A x 2 (ZigZag) Single-phase 240V: 242 A (ZigZag)

shindaiwa®

DGK100D

Latest clean engine,
quietest genset.



Powered by
ISUZU

Alternator

Rated Output	100kVA
	80kW
Voltage-Three phase	208,240,480 V
Voltage-Single phase	120,139,240 V
Frequency	60Hz
Rated speed	1,800 rpm
Winding	Star with Neutral

Engine

Type	Vertical Water-cooled 4-cycle Diesel
Model (Manufacturer)	BT- 4HK1(ISUZU)
Engine Emission	EPA Tier3 (*1800min ⁻¹ only)
Continuous rated output	114.7kW(153hp)/1800min ⁻¹
Rated speed,50/60Hz	1500/1800 rpm
Displacement	5.193L
Combustion system	Direct Injection, Turbo, Intercooler
Cooling method	Radiator, Water
Fuel tank capacity	222 L

Features

Shutdowns	Lamp indication with shutdown
Warning	Lamp indication
Dimensions (L*W*H mm , Dry weight kg)	(L)102-(W)49-(H)71 inch, 4,564 lbs.
Sound Level (No Load)	58dB(A) @ 7m

Generating

100kVA

208,240,480V
3-phase

Sound Level (no load@7m)

58 dB(A)

Dimension(inch)

(L)102-(W)49-(H)71

Weight (lbs.)

4,564

Engine (Diesel)

Isuzu 4HK1

EPA Tier3

ECM device

Features

Single side maintenance

Safety output terminal cover

102inc length for US vehicle

shindaiwa®

DGK100D

**Latest clean engine,
quietest genset.**

Easy access to radiator & muffler

Single side maintenance for engine

Safety door lock devices

Detachable plate for flushing skid inside

Removable side doors



Engine operating switch behind control panel

Easy to check engine condition by EMPS

Lockable voltage selector switch

Indication lamp



Terminal cover safety switch

Detachable plate for additional receptacles

Lockable terminal cover

Large size of output terminal lugs



All doors are lockable

Easy connection to auxiliary tanks

Easy access to internal fuel tank 4cm bung



YAMABIKO

Industrial Machinery Div.

35 SHIN-UJIGAMI KITA-HIROSHIMA-CHO

YAMAGATA-GUN HIROSHIMA 731-1597

JAPAN

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SPECIFICATIONS

DGK100D

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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) 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 ⁻¹	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 ⁻¹
	Rated Speed		min ⁻¹	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

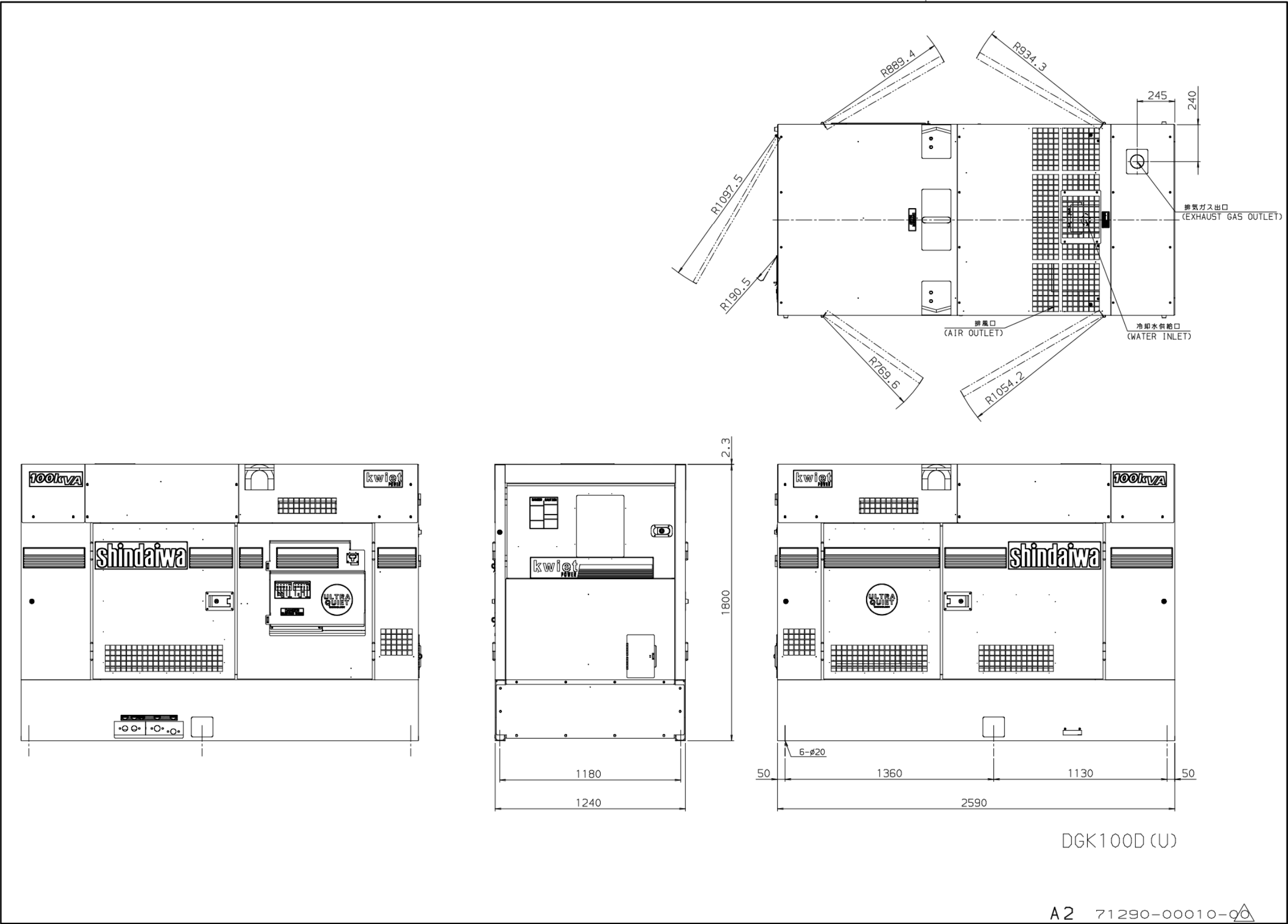
(2) Protection Device

Item	Set Value	Monitor Lamp	Engine Shut-Down
Diagnosis		○	-
Boost Temp.	85°C	○	-
Over Speed	2070min ⁻¹	○	-
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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