

**shindaiwa®**

# **SPECIFICATIONS**

**Diesel Engine Generator**

# **DGK15F**

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# **CHAPTER 1: GENERAL**

## **1. Application**

- (1) Power Source for light, electric tools and appliances.

## **2. Standard**

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 4 final

## **3. Design Condition**

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

## **4. 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

## **5. Painting**

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

## **6. 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: 67dB(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		DGK15F	
Alternator	Generator Type	-		Revolving Field Brushless	
	Rated Frequency	Hz		60	
	Rated Output(Prime)	Three phase	kVA	15	
			kW	12	
		Single phase	kVA	9	
			kW	9	
	Standby Output	Three phase	kVA	16.5	
			kW	13.2	
		Single phase	kVA	9.9	
			kW	9.9	
	Rated Voltage	Three phase	V	208/240	
		Single phase	V	120/139/240	
	Rated Current	Three phase-208V	A	36.1	
		Three phase-240V	A	36.1	
		Single phase-120V	A	37.5 × 2	
Single phase-240V		A	37.5		
Power Factor	-		Three phase 0.8, Single phase 1.0		
Insulation class	-		F		
Excitation	-		Self-Excitation (brushless)		
No. of Poles	-		2		
Engine	Type	-		Vertical Water-Cooled 4-Cycle Diesel	
	Model(Manufacturer)	-		D902(KUBOTA)	
	No. of Cylinders (bore × stroke)	(in./mm)		3(2.83x3.78/72x73.6)	
	Continuous Rated Output	hp		20.7	
	Rated Speed	rpm		3,600	
	Displacement	cu.in./liters		55/0.898	
	Combustion System	-		Indirect Injection	
	Cooling Method	-		Water cooled	
	Starting Method	-		Electric	
	Fuel	-		No.2-D,S15 EPA regulation	
	Lubricating Oil	-		API service-type CD class or better	
	Fuel Tank Capacity	gal./liters		9.6/36.4	
	Lubricant Volume	gal./liters		0.95/3.6	
	Coolant Volume	gal./liters		1.1/4.1(including sub-tank 0.16/0.6)	
	Starting Motor Capacity	V-kW		12-1.2	
Charging Alternator Capacity	V-W		12-150		
Battery Capacity	V-Ah		12-36		
Unit	Length	in./mm		52/1,310	
	Width	in./mm		25/640	
	Height	in./mm		35/895	
	Dry Weight	lbs./kg		926/420	
	Net Weight	lbs./kg		1,014/460	

\*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.
Voltage Regulator .....	1 pc.
Amp. Meter Selector .....	1 pc.
Breaker Trip Selector .....	1 pc.
Voltage Selector Switch .....	1 pc.
Single Phase Receptacle (120V) .....	2 pcs.
Single Phase Receptacle (240/120V) .....	1 pc.

### (2) Safety Device

#### Breaker

● Main Breaker (3-Phase) .....	1 pc.
● Main Breaker (1-Phase) .....	1 pc.
● 3-Phase Breaker .....	1 pc.
● 1-Phase Breaker .....	1 pc.
● 1-Phase Breaker (120V) .....	2 pcs.
● 1-Phase Breaker (240/120V) .....	1 pc.

Protection Monitor..... 1 pc.

- Pre-Heat
- Battery Charge
- Spill Containment (with auto engine shut off feature)
- Water Temp. (with auto engine shut off feature)
- Oil Pressure (with auto engine shut off feature)
- Over Speed (with auto engine shut off feature)

Door with locking feature (all external door/cover) ..... 1 each

- Right Door
- Left Door
- Front Panel
- Terminal Covers (2)
- Fuel Filling Cap Cover

Auto Shut off Feature (when some mechanical issue was detected.)

### (3) Equipment

Starting Switch .....	1 pc.
Engine Malfunction Monitor Lamp.....	1 pc.
Engine Monitor (engine speed) .....	1 pc.
Display Selector Switch.....	1 pc.
Monitor Lamp .....	1 pc.
Pilot Lamp.....	1 pc.

Glow Lamp (Preheat Lamp) .....	1 pc.
Spill Containment Over Flow Lamp .....	1 pc.
Output Selector Switch (3-phase & 1-phase) .....	1 pc.
Fuel Tank.....	1 pc.
Fuel Meter.....	1 pc.
Fuel Filter (w/ fuel strainer) .....	1 pc.
Spill Containment .....	1 pc.
Hour Meter .....	1 pc.
Breaker Trip Selector Switch .....	1 pc.
Air Cleaner .....	1 pc.
Fuel Drain Plug .....	1 pc.
Oil Drain Plug.....	1 pc.
Water Drain Plug.....	1 pc.
Noise Reduction Air Flow System .....	1 pc.
"Made in Japan"	

## 2. Feature

### (1) Feature

- Sound Level 67DB(A) at 7m distance under no load
- "Simul Phase" (3-phase & 1-phase)
- Generating Performance 3-phase & 1-phase
- Environmental EPA Tier 4 Final & Noise Reduction
- Fuel Tank Capacity 9.6 gal. (36.4 Liters)
- Dry Weight 926 lbs. (420 kg)
- Dimensions (LxWxH) 52 x 25 x 35 in. (1310 x 640 x 895 mm)
- Made in Japan

### (2) Protection Device

Item	Set Value	Monitor Lamp	Auto Engine Shut off
Water Temp.	239° F/115°C	✓	✓
Oil Pressure	14psi/98kPa	✓	✓
Battery Charge	-	✓	-
Engine Speed	4140min <sup>-1</sup>	✓	✓
Air Filter	when clogged -	✓	
Spill Containment	13.7 gal./51.7L	✓	✓
Overload	Breaker trips.	-	-

(3) Fuel Economy

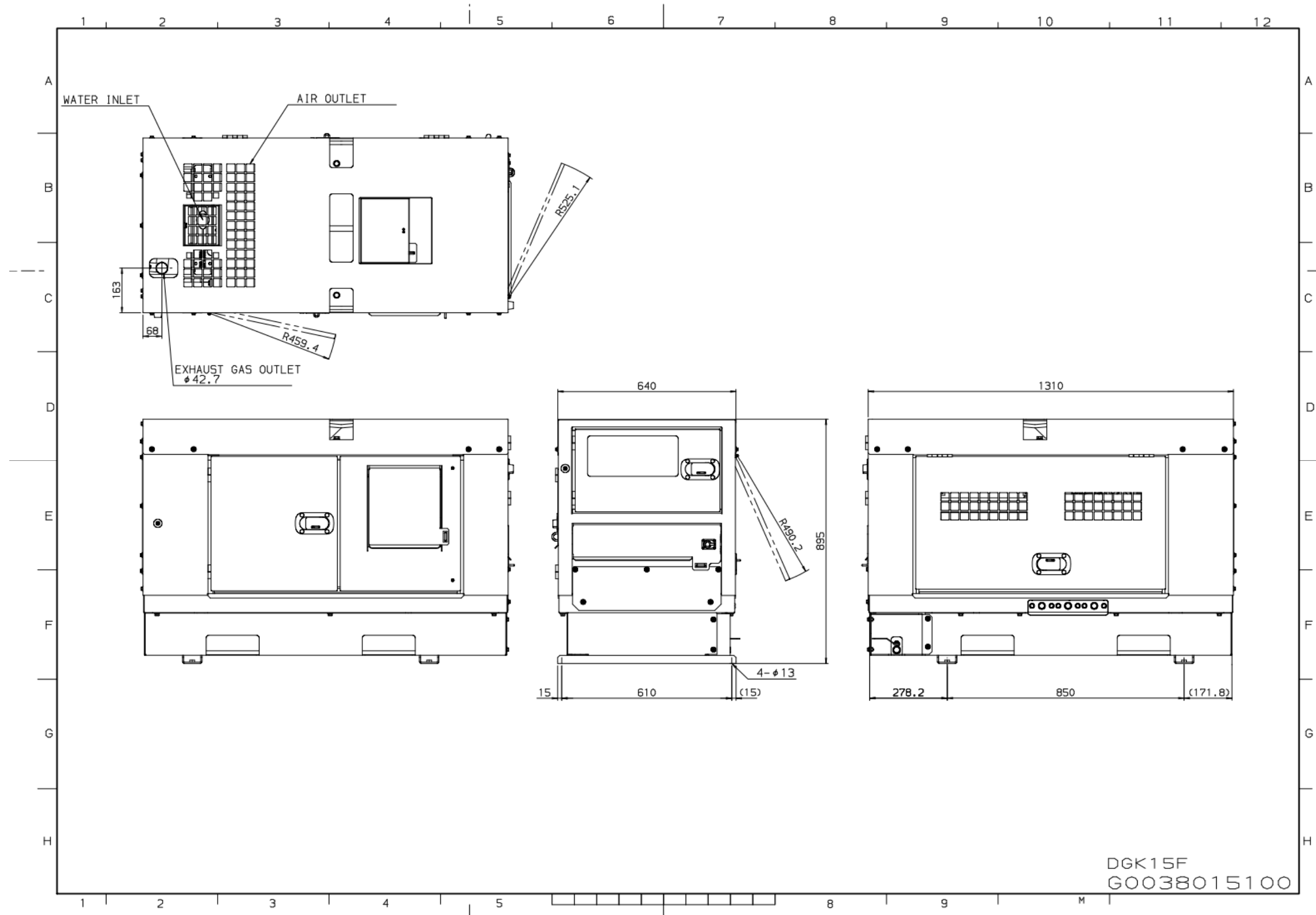
Criteria	Fuel Consumption	Continuous Operating Hrs
Full load	1.24 gal./hr (4.7 L/hr.)	8
3/4 load	1.03 gal./hr (3.9 L/hr.)	9
1/2 load	0.84 gal./hr (3.2 L/hr.)	12
1/4 load	0.66 gal./hr. (2.5 L/hr.)	15
No Load	n/a	n/a

\*Above value would change according to the condition in use.

(4) Accessory

Owner's & Operator's Manual	1 copy
Engine Instruction Manual	1 copy
Starter Key	2 pcs.

# CHAPTER 4: APPEARANCE





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