

shindaiwa®

SPECIFICATIONS

Diesel Engine Generator

DGK25E

DGK25EU

DGK25EU-50

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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) Voluntary Emission Regulations for non-road engines in Japan by MLIT.
- (4) EPA Interim Tier 4 Emission Standard
- (5) CARB Emission Standard

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

2. Design Conditions

- (1) Installation Place: Outside Only.
- (2) Ambient Temperature: 5 to 104° F (-15 to 40°C)
- (3) Humidity: Less than 85%
- (4) Altitude: Less than 3280 ft. (1000 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: 56dB(A) @7m distance at full load.
53dB(A) @7m distance under no load at rated rpm.
- (3) Fuel Tank
A steel fuel tank is equipped and incorporated with the electrical level gauge.

CHAPTER 2: SPECIFICATIONS

Model		Unit		DGK25E/EU/EU-50
Alternator	Generator Type	-		Revolving Field Brushless, AC Simultaneous, 3 Phase-120V/240V, 1 Phase
	Rated Frequency	Hz		60/50 (± less than 5%)
	Rated Output	kVA (kW)		25 (20)
	Rated Voltage	Three phase	V	208/240/ [480] *1
		Single phase	V	120/139/240/[277] *1
	Rated Current	Three phase-208V	A	69
		Three phase-240V	A	60
		Three phase-480V	A	30
		Single phase-120V	A	62.5×2
		Single phase-240V	A	62.5
Power Factor	-		Three Phase 0.8, Single Phase 1.0	
Insulation Class	-		F	
Excitation	-		Self Excitation (brushless)	
No. of Pole	-		4	
Engine	Type	-		Vertical Water-Cooled 4-Cycle Diesel
	Model (Manufacturer)	-		4LE1 (ISUZU)
	No. of Cylinder (bore × stroke)	(in./mm)		4 (3.35×3.78/85×96)
	Continuous Rated Output	hp (kW)		31 (23)
	Rated Speed	min ⁻¹		1800/1500
	Displacement	cu.in./liters		133/2.179
	Combustion System	-		Swirl Chambered
	Cooling	-		Radiator
	Lubricating	-		Forced Lubrication
	Starting	-		Electric
	Fuel	-		ASTEM No. 2-D EPA regulation (*2)
	Lubricating Oil	-		SAE Class CD or higher
	Fuel Tank Capacity	gal./liters		20.6/78
	Lubricant Volume	gal./liters		2.2/8.5
	Cooling Water Volume	gal./liters		2.2/8.2
	Starting Motor Capacity	V-kW		12-3.0
	Charging Alternator Capacity	V-A		12-20
Battery Capacity	-		12V-80AH	
Unit	Dimensions (L x W x H)	in./mm		57 x 31 x 45/1440 x 780 x 1140
	Dry Weight	lbs./kg		1543/700

*Specifications are subject to change without notice.

*1: US emission certified at 1800 rpm. only.

*2: Low sulfur or ultra low sulfur diesel fuel only.

CHAPTER 3: EQUIPMENT AND FEATURE

1. Equipment

(1) Generator

Voltage Meter	1 pc.
Ampere Meter	1 pc.
Frequency Meter	1 pc.
GFCI Receptacle (Single Phase-120V).....	2 pcs.
Twist Lock Receptacle (Single Phase-240V/120A)	2 pcs.
Voltage Selector Switch (480/277V & 240/139V)	1 pc.
AC Voltage Adjusting Dial.....	1 pc.
AC Ampere Meter Selector Switch	1 pc.
AC Voltmeter Selector Switch	1 pc.

(2) Safety Device

3-Phase Circuit Breaker - with leakage shut off device	1 pc.
1-Phase Circuit Breaker - with leakage shut off device	1 pc.
1-Phase Circuit Breaker (240/120V) - with leakage shut off device	1 pc.
1-Phase Circuit Breaker (120V) - with leakage shut off device	1 pc.
Protective Monitor	1 set
●Battery Charge (with auto engine shut-down feature)	
●Oil Pressure (with auto engine shut-down feature)	
●Water Temperature (with auto engine shut-down feature)	
Output Terminal Cover	1 pc.

(3) Equipment

Starter Switch.....	1 pc.
Throttle Switch	1 pc.
Monitor Lamp.....	1 pc.
Fuel Meter.....	1 pc.
Oil Pressure Meter	1 pc.
Water Temp. Meter.....	1 pc.
Fuel Drain Plug	1 pc.
Oil Drain Plug.....	1 pc.
Coolant Drain Hose.....	1 pc.
Hour Meter	1 pc.
Pilot Lamp.....	1 pc.
Glow Lamp.....	1 pc.
Panel Light.....	1 pc.
Fuel Filter.....	1 pc.
Air Cleaner.....	1 pc.
Ultra Low Noise Air Flow System	

2. Feature

(1) Feature

- Generating Performance Patented Simultaneous 3-Phase and Dual 1-Phase Power.
- Sound Level 56B(A) at 7m distance at full load.
53B(A) at 7m distance at no load.
- 2 Way Drive Control High/Low Speed
- Environmental Quiet Sound and Low Emission (comply with EPA & CARB regulations).
- Fuel Tank Capacity 20.6 gal. (78 Liters)
- Dry Weight 1543 lbs. (700 kg)
- Dimensions (LxWxH) 57" x 31" x 45" (1440 x 780 x 1140 mm)

(2) Protection Device

Item	Set Value	Engine Shut-Down
High Water Temp.	230° F/110°C	✓
Low Battery Charge	-	✓
Low Oil Pressure	10 psi/69kPa	✓

(3) Fuel Economy

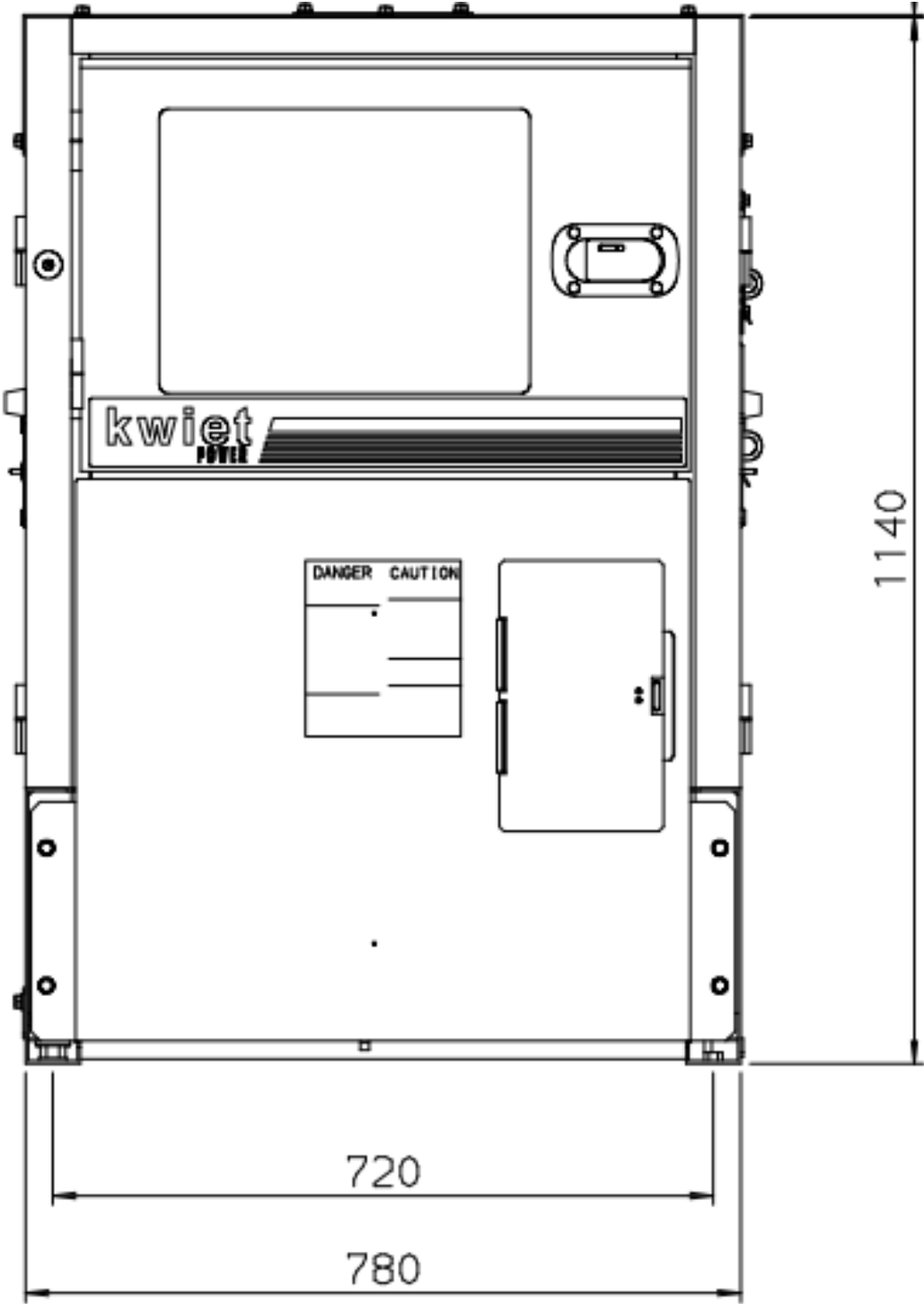
Criteria	Fuel Consumption	Continuous Operation Hours
Full load	1.57 gal./hr (5.94L/hr.)	13 hrs.
3/4 load	1.19 gal./hr (4.5L/hr.)	-
1/2 load	0.89 gal./hr (3.36L/hr.)	-
1/4 load	0.59 gal./hr (2.25L/hr.)	-

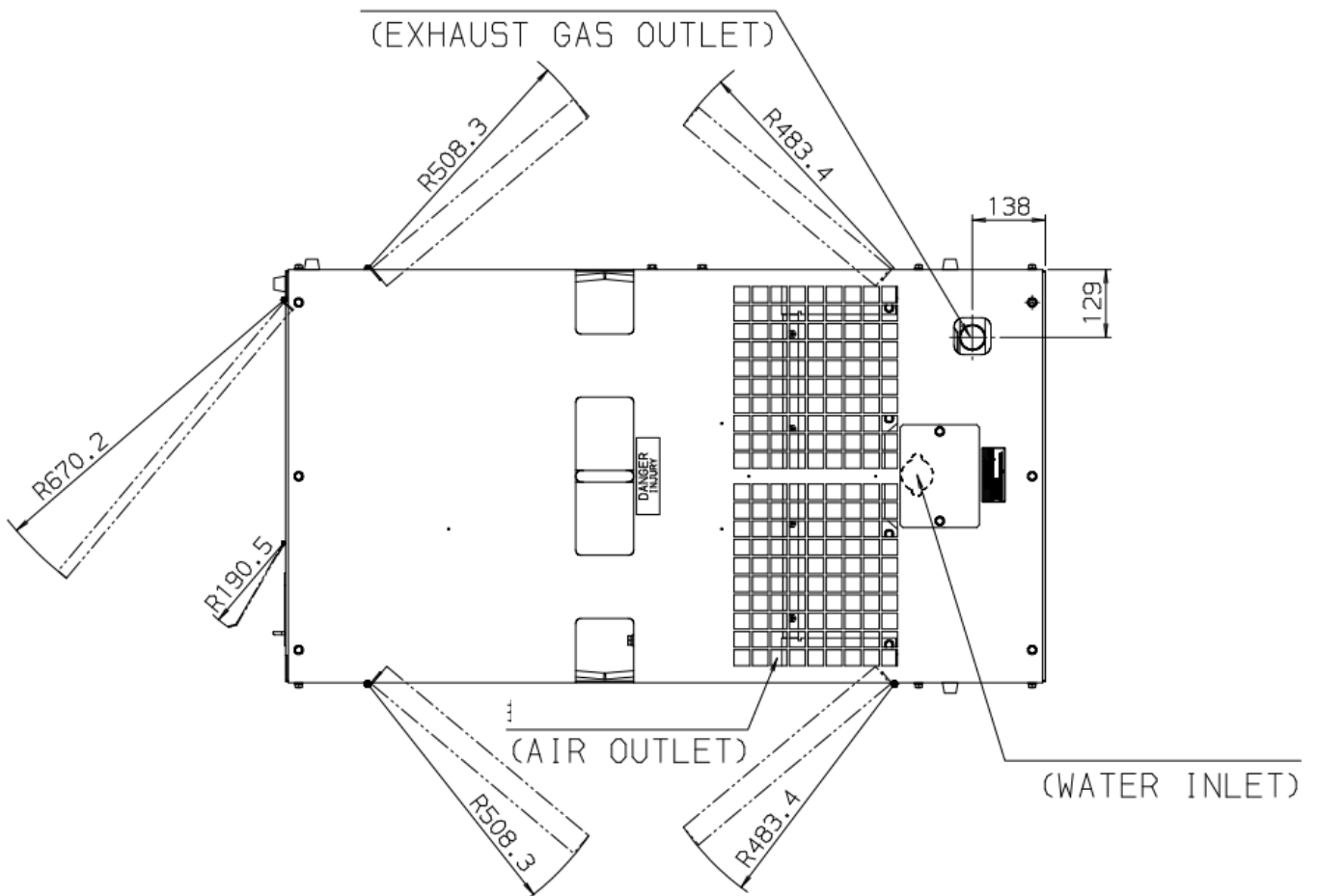
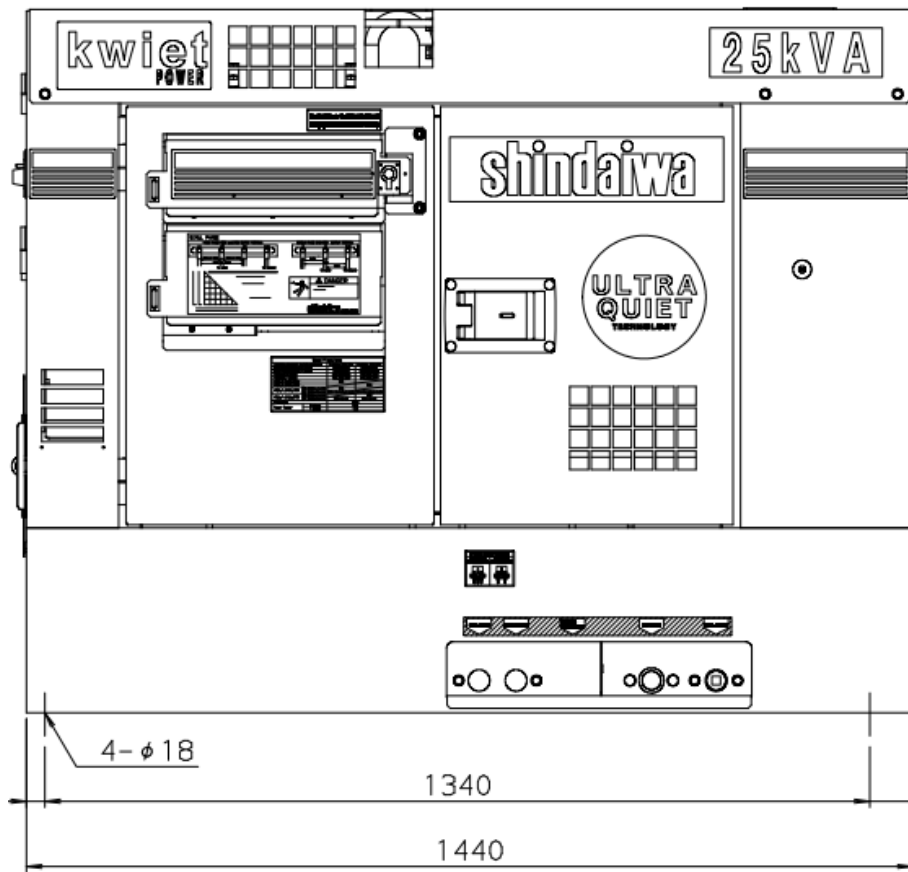
*Above value is for reference only as it may vary depending on the conditions.

(4) Accessories

Operator's Manual	1 copy
Engine Warranty Manual	1 copy
Starter Key	2 pcs.

CHAPTER 4: APPEARANCE





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YAMABIKO CORPORATION

**35 SHIN-UJIGAMI, KITA-HIROSHIMA-CHO,
YAMAGATA-GUN, HIROSHIMA 731-1597 JAPAN**

Telephone: (81)826-72-5140

Fax: (81) 826-72-7004

www.yamabiko-corp.co.jp