

**Red-D-Arc
Welderrentals**

SPECIFICATIONS

Diesel Engine Generator

RDA150T3

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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 LEMA. (Tier 3)
- (4) EPA Tier 3 Emission

*LEMA stands of Japan Land Engine Manufacturers Association.

2. Design Conditions

- (1) Installation Place: Outside Only.
- (2) Ambient Temperature: -15 to +40°C (5 to 104°F)
- (3) Humidity: Less than 85%
- (4) Altitude: Less than 1000 meters (3280 ft.) 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) 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: 59dB(A) @7m distance under no load, 1800 min⁻¹.

- (3) Fuel Tank

A steel fuel tank is equipped and incorporated with the electrical level gauge.

CHAPTER 2: SPECIFICATIONS

| Model | | Unit | RDA150T3 | |
|------------------|----------------------------------|----------------------------|--|------------------|
| Alternator | Generating Type | - | Rotating Filed, Brushless 3-Phase Synchronous Alternator | |
| | Rated Output | kVA | 150 | |
| | | kW | 120 | |
| | Voltage – Three phase | V | 208 / 480 | |
| | Voltage – Single phase | V | 120 / 240 / 277 | |
| | Amps | Three phase – 480V | A | 180 |
| | | Three phase – 208V | A | 416 |
| | | Single phase – 240V | A | 361 (zigzag) |
| | | Single phase – 120V | A | 361 x 2 (zigzag) |
| | Rated Frequency | Hz | 60 | |
| | Winding | - | 3-phase, 4-wire Star with neutral / Zig-zag | |
| | Power factor | % | 80 | |
| | Insulation class | - | F | |
| Excitation | - | Self-Excitation(Brushless) | | |
| No. of poles | - | 4 | | |
| Engine | Types | - | Vertical Water-cooled 4-cycle Diesel Engine | |
| | Model (Manufacturer) | - | 6HK1 (ISUZU) | |
| | No. of Cylinders (bore x stroke) | (in. / mm) | 6 (4.53x4.92 / 115x125) | |
| | Continuous rated output | kW | 142 | |
| | | HP | 190 | |
| | Rated speed | rpm | 1800 | |
| | Displacement | cu.in. / liters | 475.4 / 7.790 | |
| | Combustion system | - | Direct Fuel Injection with Turbo Charger | |
| | Cooling method | - | Radiator | |
| | Lubricating method | - | Forced lubrication | |
| | Starting method | - | Electric start | |
| | Fuel | - | Diesel | |
| | Lubricant oil | - | CD class | |
| | Fuel tank capacity | gal. / liters | 74 / 280 | |
| | Lubricant volume (Full) | gal. / liters | 10 / 38 | |
| | Cooling water volume | gal. / liters | 6.3 / 23.8 | |
| | Starting motor capacity | V-kW | 24 – 5.0 | |
| | Charging dynamo capacity | V-A | 24 - 50 | |
| | Battery | - | 105E41R x 2 | |
| Battery capacity | V-AH | 12(V) – 100AH | | |
| Unit | Length | in. / mm | 135.8 / 3450 | |
| | Width | in. / mm | 48.8 / 1240 | |
| | Height | in. / mm | 72.8 / 1850 | |
| | Dry Weight | lbs. / kg | 6504 / 2950 | |
| | Installed Weight | lbs. / kg | 7187 / 3260 | |

*Outputs shown in above *1 are when the voltage selector switch is set at 240V.

CHAPTER 3: EQUIPMENT AND FEATURE

1. Equipment

(1) Generator

| | |
|------------------------------------|--------|
| AC Output Receptacle | |
| 1-Phase Receptacle (120V)..... | 2 pcs. |
| 1-Phase Receptacle (240/120V)..... | 3 pcs. |
| Circuit Breaker (120V)..... | 2 pcs. |
| Circuit Breaker (240/120V)..... | 3 pcs. |
| Main Circuit Breaker..... | 1 pc. |

(2) Safety Device

| | |
|---|--------|
| Emergency Stop Button | 1 pc. |
| Terminal Cover..... | 1 pc. |
| Fuel Inlet Cover with locking structure | 1 pc. |
| Protection Monitor with automatic engine shutdown feature | 1 set. |

(3) Equipment

| | |
|-----------------------------------|-------|
| Warning Monitor..... | 1 set |
| • Diagnosis | |
| • Boost | |
| • Battery Charge | |
| • Oil Pressure | |
| • Over Heat | |
| • Over Speed | |
| Volt Meter..... | 1 pc. |
| Amp. Meter | 1 pc. |
| Frequency Meter..... | 1 pc. |
| Volt Meter Selector Switch | 1 pc. |
| Voltage Selector Switch | 1 pc. |
| Amp. Meter Selector Switch | 1 pc. |
| Voltage Adjusting Regulator | 1 pc. |
| Fuel Meter..... | 1 pc. |
| Oil Pressure Meter | 1 pc. |
| Water Temp. Meter..... | 1 pc. |
| Hour Meter | 1 pc. |
| Voltage Regulator | 1 pc. |
| Ultra-Quiet Air Flow System | |
| Auto Start Switch (Optional) | |

2. Feature

(1) Feature

- Sound Level 59dB(A) at 7m distance under no load, 1800 min⁻¹.
- Generating Performance 1-phase & 3-phase
- 2 Way Drive Control High/Low Speed
- Environmental EPA Phase 3 Compliance, Ultra-Quiet
- Fuel Tank Capacity 74 Liters (280 gal.)
- Dry Weight 2,950 kg (6,504 lbs.)
- Dimensions (LxWxH) 3450 x 1240 x 1850 mm (135.8 x 48.8 x 72.8 in.)

(2) Protection Device

| Item | Set Value | Engine Shut-Down |
|--------------------|------------------------|------------------|
| High Coolant Temp. | 221°F | ○ |
| Low Oil Pressure | 14.5 psi | ○ |
| Low Battery Charge | - | - |
| Diagnosis | - | △ |
| High Boost Temp. | 185°F | - |
| Over Speed | 2070 min ⁻¹ | - |

(3) Fuel Economy

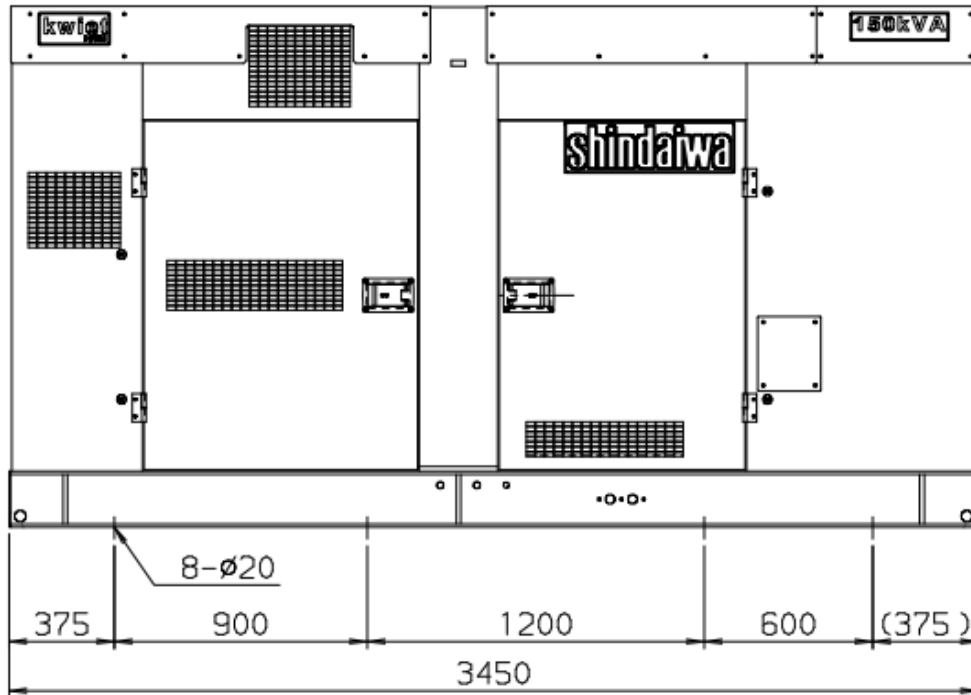
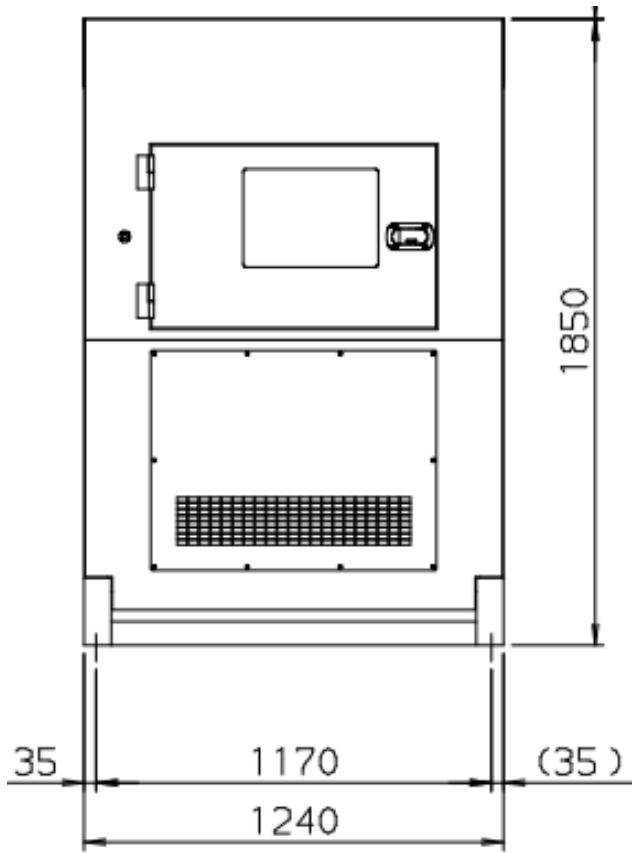
| Load | Fuel Consumption |
|-----------|-------------------------|
| Full load | 32L/hr. (8.45 gal./hr.) |
| 3/4 load | 25L/hr. (6.6 gal./hr.) |
| 1/2 load | 17L/hr. (4.5 gal./hr.) |
| 1/4 load | 10L/hr. (2.6 gal./hr.) |

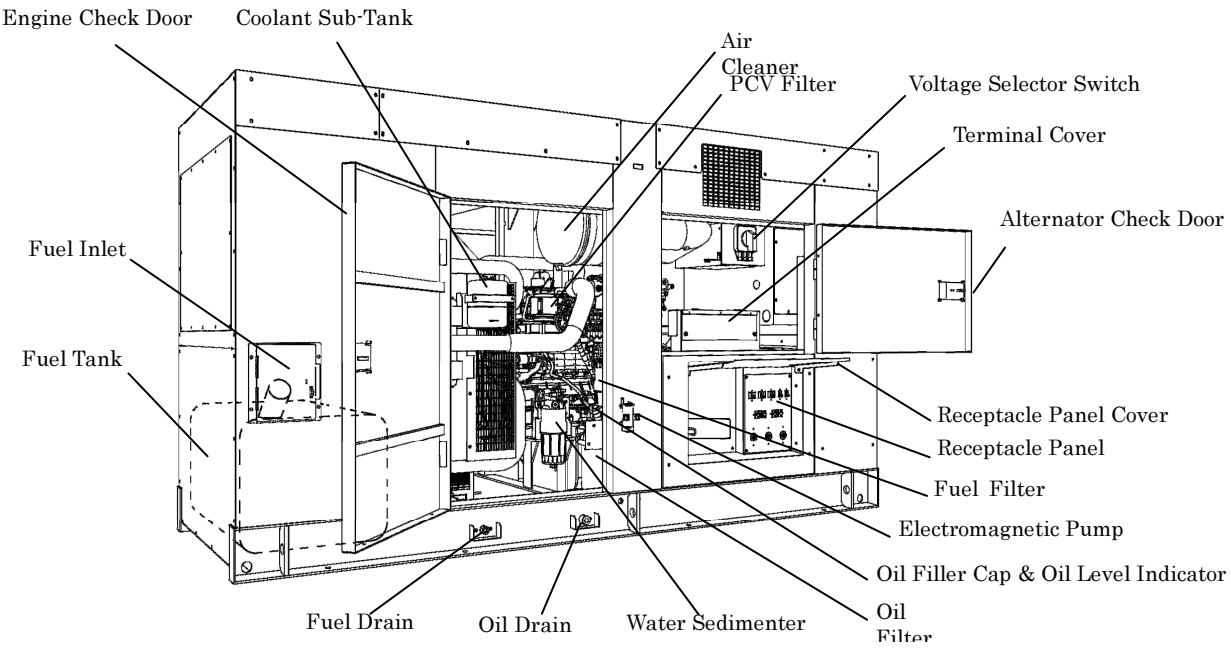
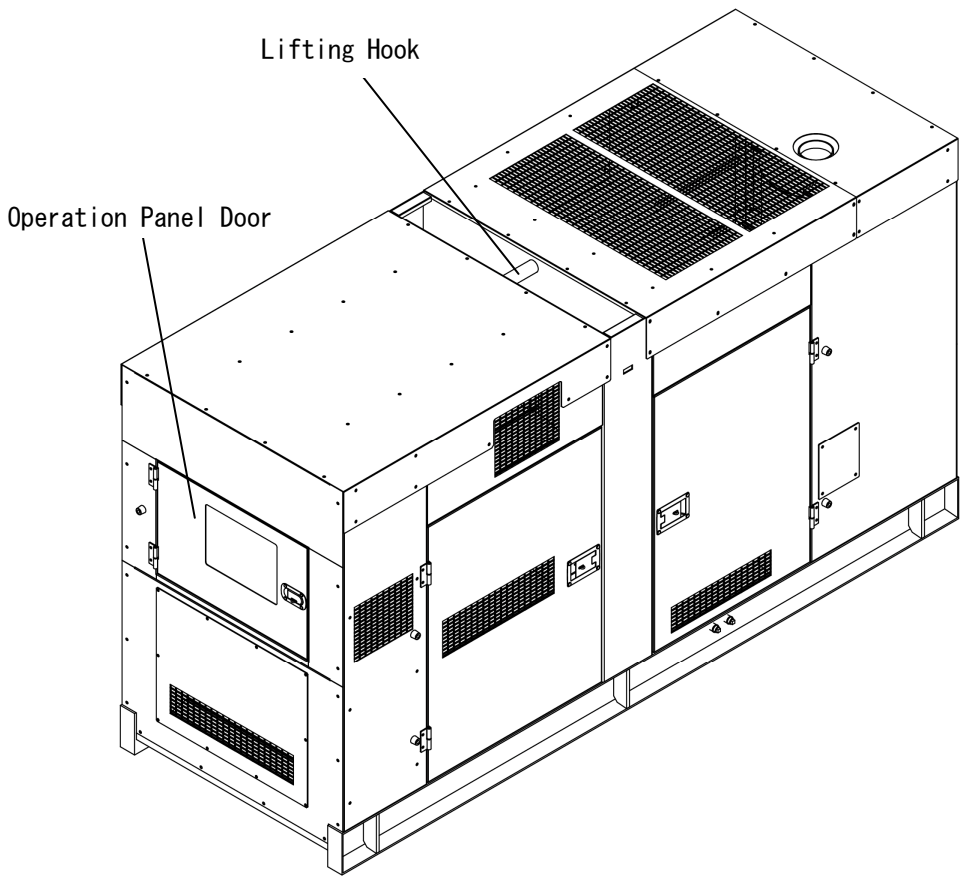
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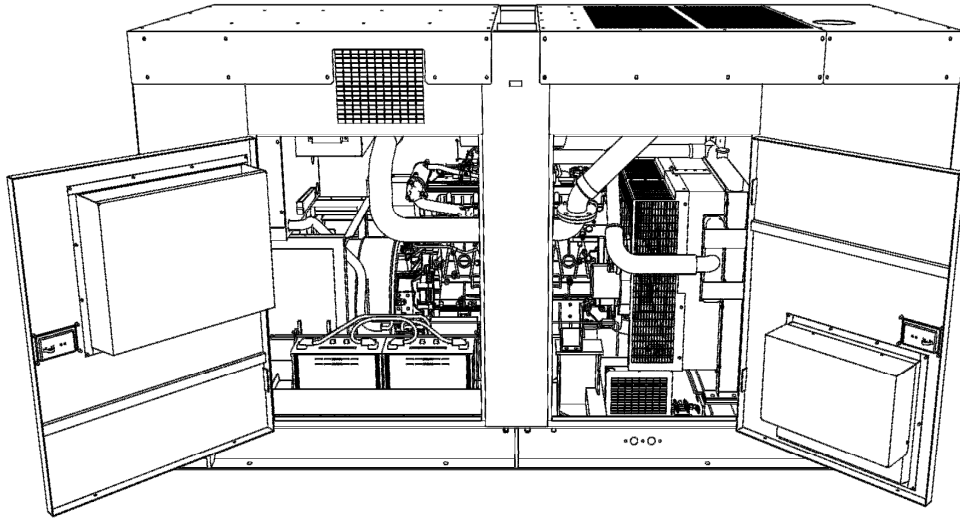
(4) Accessories

| | |
|-----------------------------|----------------|
| Owner's & Operator's Manual | 1 copy |
| Engine Instruction Manual | 1 copy |
| Engine Warranty Statement | 1 copy |
| Starter Key | 1 set (2 pcs.) |

CHAPTER 4: APPEARANCE







Red-D-Arc Welderrentals

Call us (toll free) at 1-866-733-3272 (US and Canada)
reddarc.com