Red-D-Arc Welderentals

SPECIFICATIONS

Diesel Engine Generator

RDA60T3S

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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 80%
- (4) Altitude: Less than 300 meters (984 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: 60dB(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

Revolving Field Brushless AC Simultaneous 3-Phase-120V/240V, Single Phase Rated Frequency Hz 60		Model	Unit		RDA60T3s	
Rated Frequency			-			
Rated Frequency		Generator Type			· · · · · · · · · · · · · · · · · · ·	
Rated Output 3-phase		D / 15				
Rated Output Single phase		Rated Frequency	HZ	1) (4		
Rated Output Single phase V 36/[18] *1			3-phase			
Rated Voltage		Rated Output	•		_	
Rated Voltage		·	Single phase			
Rated Current 3-phase-240V A 144 3-phase-480V A 72 Single phase-120V A 150×2 [75 x 2]*1 Single phase-240V A 150 [75]*1 Power Factor - 3-phase 0.8, Single phase 1.0 Insulation class - F Excitation - Self Excitation (brushless) No. of Poles - 4 Type - Vertical Water-Cooled 4-Cycle Diesel Model(Manufacturer) No. of Cylinders (bore × stroke) (in./mm) 4 (3.94×4.72/100×120) No. of Cylinders (bore × stroke) Continuous Rated Output A No. of Cylinders (bore x stroke) Output Rated Speed rpm 1800 Displacement Cu.in./liters Combustion System - Direct Injection (Turbo-charged) Cooling Method - Radiator Electric Starting Method - Forced Lubrication Electric Fuel - No. 2-D EPA regulation CF class or higher Electric Turbo-charged Starting Moder Capacity V-kW 12-3.0 Charging Alternator Capacity Charging Alternator Capacity Starting Moder Capacity - 12-960 Capacity Charging Alternator V-W C	5					
Rated Current 3-phase-240V A 144 3-phase-480V A 72 Single phase-120V A 150×2 [75 x 2]*1 Single phase-240V A 150 [75]*1 Power Factor - 3-phase 0.8, Single phase 1.0 Insulation class - F Excitation - Self Excitation (brushless) No. of Poles - 4 Type - Vertical Water-Cooled 4-Cycle Diesel Model(Manufacturer) No. of Cylinders (bore × stroke) (in./mm) 4 (3.94×4.72/100×120) No. of Cylinders (bore × stroke) Continuous Rated Output A No. of Cylinders (bore x stroke) Output Rated Speed rpm 1800 Displacement Cu.in./liters Combustion System - Direct Injection (Turbo-charged) Cooling Method - Radiator Electric Starting Method - Forced Lubrication Electric Fuel - No. 2-D EPA regulation CF class or higher Electric Turbo-charged Starting Moder Capacity V-kW 12-3.0 Charging Alternator Capacity Charging Alternator Capacity Starting Moder Capacity - 12-960 Capacity Charging Alternator V-W C	Jate	Rated Voltage	•			
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Single phase-240V A 150 [75]*1		Rateu Guirent	•			
Power Factor						
Insulation class		Power Factor		/\		
Excitation			_			
No. of Poles			_		Self Excitation (brushless)	
Type			<u>-</u>		4	
Model(Manufacturer)			_		Vertical Water-Cooled 4-Cycle Diesel	
No. of Cylinders (bore × stroke)			_		•	
Continuous Rated Output		,				
Output Rated Speed rpm 1800			(in. /mm)		4 (3.94×4.72 /100×120)	
Rated Speed rpm 1800			hn		77	
Displacement cu.in./liters 230/3.769 Combustion System - Direct Injection (Turbo-charged) Cooling Method - Radiator Lubricating Method - Forced Lubrication Starting Method - Electric Fuel - No. 2-D EPA regulation Lubricating Oil - CF class or higher Fuel Tank Capacity gal./liters 111/420 Lubricant Volume gal./liters 3.5/13.2 (including filter 0.1/0.4) Cooling Water Volume gal./liters 3.3/12.5 (including sub-tank 0.4/1.6) Starting Motor Capacity V-kW 12-3.0 Charging Alternator Capacity V-W 12-960 Capacity Battery Capacity - 12V-92AH Length in./mm 78/1970 Width in./mm 35/880 Height in./mm 64/1630 Dry Weight Ibs./kg 2843/1290			np			
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Lubricating Method - Forced Lubrication			-			
Fuel - No. 2-D EPA regulation Lubricating Oil - CF class or higher Fuel Tank Capacity gal./liters 111/420 Lubricant Volume gal./liters 3.5/13.2 (including filter 0.1/0.4) Cooling Water Volume gal./liters 3.3/12.5 (including sub-tank 0.4/1.6) Starting Motor Capacity V-kW 12-3.0 Charging Alternator Capacity V-W 12-960 Battery Capacity - 12V-92AH Length in./mm 78/1970 Width in./mm 35/880 Height in./mm 64/1630 Dry Weight Ibs./kg 2843/1290	<u>e</u>		-			
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Charging Alternator Capacity V-W 12-960 Battery Capacity - 12V-92AH Length in./mm 78/1970 Width in./mm 35/880 Height in./mm 64/1630 Dry Weight lbs./kg 2843/1290					`	
Capacity V-VV 12-960 Battery Capacity -			V-kW		12-3.0	
Battery Capacity			V-W		12-960	
Length in./mm 78/1970 Width in./mm 35/880 Height in./mm 64/1630 Dry Weight Ibs./kg 2843/1290			-		12V-92AH	
Width in./mm 35/880 Height in./mm 64/1630 Dry Weight lbs./kg 2843/1290			in./mm			
Height in./mm 64/1630 Dry Weight Ibs./kg 2843/1290						
Dry Weight Ibs. /kg 2843 /1290	Juit					
	ر	_				
Installed vvelgnt IDS./kg 3/U3/168U		Installed Weight	lbs./kg		3703 /1680	

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

^{**}Specifications subject to change without notice.

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
	1-Phase Breaker1	
	3-Phase Breaker1	pc.
(2)	Safety Device	
	Terminal Cover with locking structure1	
	Fuel Inlet Cover with a locking key1	pc.
	Protection Monitor with automatic engine shutdown feature	set.
(3)	Equipment	
` '	Electronic Display1	set
	Oil Pressure	
	Water Temp.	
	• Engine Speed	
	Output (kVA)	
	• Fuel Level Meter	
	Warning Monitor1	set
	Battery Charge	
	Oil Pressure	
	Water Temp.	
	Over Speed	
	◆ Air Filter	
	Spill Containment	
	• Engine	
	Volt Meter1	-
	Amp. Meter1	
	Frequency Meter	
	Breaker Trip Selector	•
	Hour Meter	
	Slow-Down Switch	-
	Display Selector	
	Voltage Regulator	
	Amp. Meter Selector1	pc.

2. Feature

(1) Feature

• Sound Level 60dB(A) at 7m distance under no load, 1800 min⁻¹.

• Generating Performance 1-phase & 3-phase (Simultaneous)

• 2 Way Drive Control High/Low Speed

• Environmental EPA Phase 3 Compliance, Low Sound Level

Fuel Tank Capacity 420 Liters (111 gal.)
 Dry Weight 1,290 kg (2,843 lbs.)

• Dimensions (LxWxH) 1970 x 880 x 1630 mm (78 x 35 x 64 in.)

(2) Protection Device

Item	Set Value	Engine Shut-Down
Water Temp.	230°F	\circ
Oil Pressure	7 psi	\circ
Over Speed	2070 min ⁻¹	\circ
Low Battery Charge	8V	
Air Filter	Clogging	-
Spill Containment	10 gal.	-
Engine Malfunction	-	-

(3) Fuel Economy

Load	Fuel Consumption
Full load	14.0L/hr. (3.69 gal./hr)
3/4 load	10.2L/hr. (2.69 gal./hr.)
1/2 load	7.2L/hr. (1.9 gal./hr.)
1/4 load	4.5L/hr. (1.18 gal./hr.)

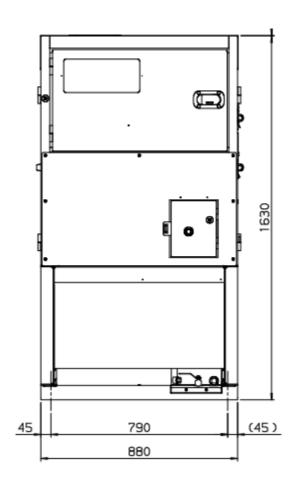
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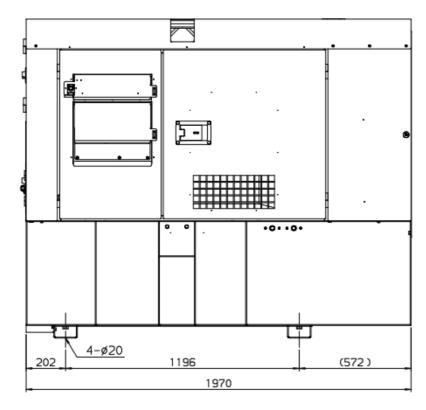
(4) Accessories

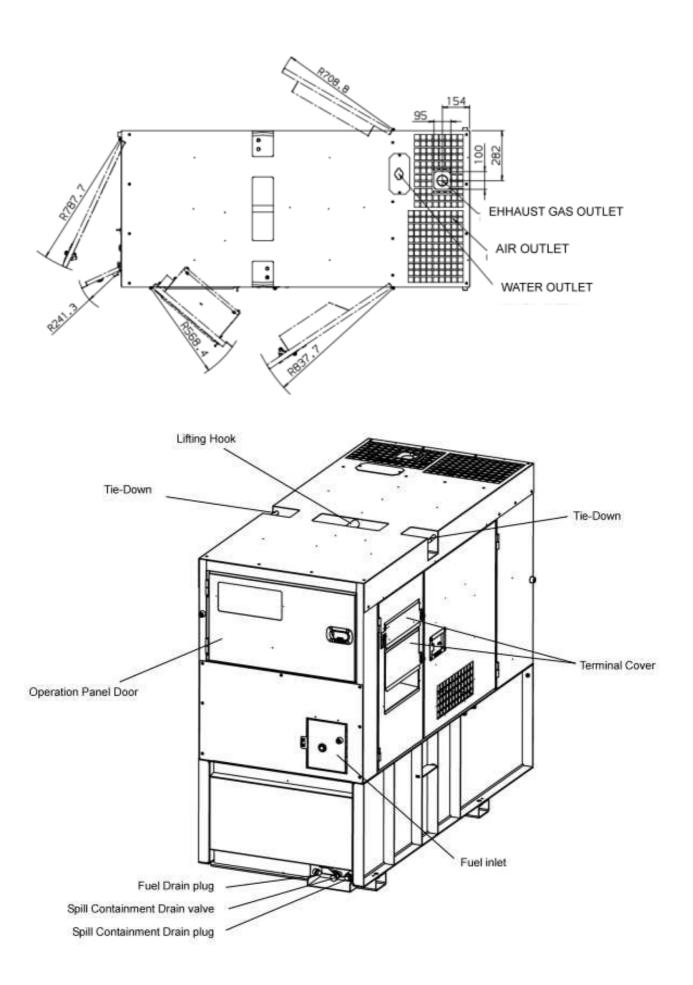
Owner's & Operator's Manual 1 copy Engine Instruction Manual 1 copy Engine Warranty Statement 1 copy

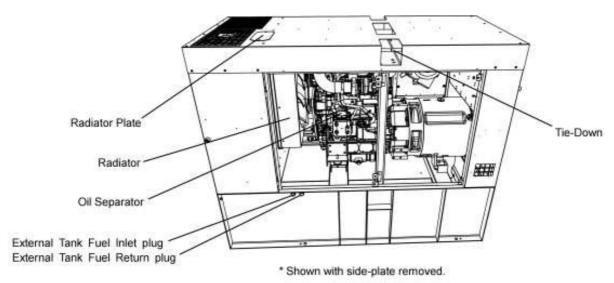
Starter Key 1 set (2 pcs.)

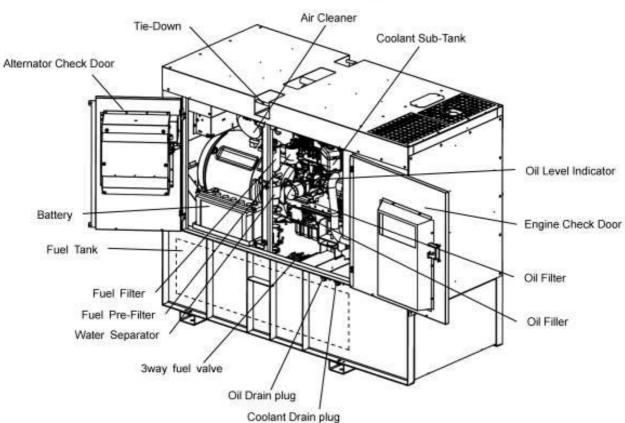
CHAPTER 4: APPEARANCE











Red-D-Arc Welderentals.

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