

**VOLVO  
PENTA**

**RK Power**



# MODEL

## RKULSTD 250VL

 Standby  
 250kW/313kVA

 60  
 Hz

 1800  
 RPM

 EPA  
 Tier3

Soundproof Generator



Referential Image

### RATINGS

Voltage (Ph-Ph/Ph-L)		208/120V	240/120V	480/277V
Phase		3PH	3PH	3PH
Power factor	Cos Phi	0.8	0.8	0.8
Frequency	Hz	60	60	60
Controlator	Deep Sea Electronics	7320 MKII	7320 MKII	7320 MKII
Engine	VOLVO PENTA	TAD 852GE	TAD 852GE	TAD 852GE
Alternator	Stamford	S4LIS-D	S4LIS-D	S4LIS-D
Leads Connection		12 Lead Parallel Wye	12 Lead Series Delta	12 Lead Series Wye

#### STANDBY

Power	kW	250	250	250
Power	kVA	313	313	313
Amperage	A	868	752	376

#### PRIME

Power	kW	225	225	225
Power	kVA	281	281	281
Amperage	A	791	686	343

#### Certifications and Standards

- EPA Tier 3 (Refers to engine emissions control)
- IBC 2021 / ASCE/SEI 7-16 - optional (Refers to seismic and wind safety of generator)
- UL 2200 - optional (Refers to the generator assembly)
- UL 142 - optional (Refers to the design, construction, and testing of the tank)
- ISO 8528-5 - optional (Refers to testing for transient response)
- Verified product design, quality, and performance integrity
- All generator systems are prototype and factory tested

#### Warranty

- 2 years or 2000 hours operational warranty

**Prime Power (PRP):** According to ISO 8528-1:2018, PRP is the maximum power available for use under variable loads for an unlimited number of hours per year within the manufacturer's prescribed maintenance intervals and under the environmental conditions specified by the manufacturer. The average power consumed over a 24-hour period must not exceed 70% of the PRP.

**Emergency Standby Power (ESP):** According to ISO 8528-1:2018, ESP is the maximum power available for use under variable loads in the event of a grid power outage or during testing conditions for a limited number of hours per year, specifically 200 hours, within the manufacturer's prescribed maintenance intervals and under the environmental conditions specified by the manufacturer. The average power consumed over a 24-hour period must not exceed 70% of the ESP.

**Continuous Power (COP):** According to Standard ISO 8528-1:2018, this is the maximum power available for continuous loads for unlimited running hours a year between the maintenance times recommended by the manufacturer under the environmental conditions established by the same.

## Application Data

### ENGINE

Manufacturer	VOLVO PENTA	Displacement	L(in3)	7.7(470)
Model	TAD 852GE	Bore x stroke	mm(in)	110x135(4.33x5.31)
Configuration	6 cylinders in line	Frequency	Hz	60
Governor isochronous	Electronic, Common Rail	Speed	RPM	1800
Certification EPA	Tier 3	Compression ratio		17.5:1

### FUEL SYSTEM

Fuel suction fitting	3/8" NPT Female
Fuel return fitting	3/8" NPT Female
Injection type	Indirect
Recommended fuel	Diesel # 2 - ULSD

### AIR REQUIREMENTS

Intake airflow	m3/min(CFM)	203(7173)
Airflow for radiator	m3/min(CFM)	14.4(509)
Type aspiration		Turbocharged

### LUBRICATION SYSTEM

Total oil capacity	L (gal)	27(7.1)
Recommended oil		SAE 15W-40

### EXHAUST SYSTEM

Back pressure	kPa (in. H <sub>2</sub> O)	10(40)
Exhaust Gas Flow	m3/min (CFM)	25.8(910)
Gas temp. (stack)	°C (°F)	480(896)

### COOLING SYSTEM

Coolant capacity	L (gal)	41(10.8)
Ambient Temp. Rad.	°C (°F)	50(122)
Recommended coolant		50/50

### ELECTRIC SYSTEM

Starting system	Volt	24
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### FUEL CONSUMPTION

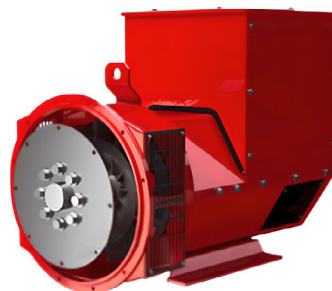
		STANDBY
At 100% load	L/hr (gal/hr)	69(18.2)
At 75% load	L/hr (gal/hr)	54.1(14.3)
At 50% load	L/hr (gal/hr)	38.05(10)



## Alternator Specifications

### GENERAL INFORMATION

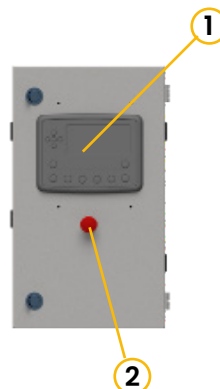
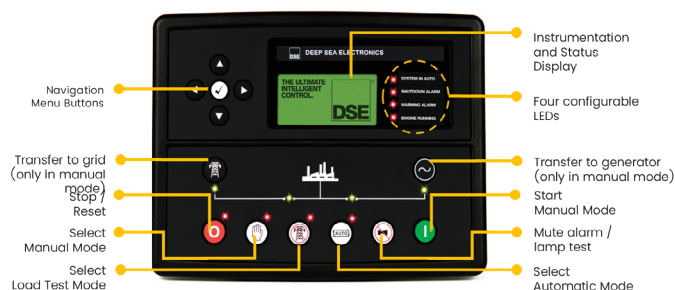
Manufacturer	Stamford
Model	S4LIS-D
Design	4 Poles   3/4 pitch   IP23
Temp. Rise   Insulation Type	Standby 150/40°C   Class H
Exciter system   AVR	PMG   MX341 (+/-1%)





## Control Panel Specifications

**DSE7320 MKII** is an Auto Start Control Module and is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single, diesel or gas, gen-set applications. Featuring a new Dual Core main processor and extended memory, the module provides faster and more powerful processing power, returning faster operational responses on intensive applications and increased functionality, with data logging facility. Monitoring an extensive number of engine parameters, the module will display warnings, shutdown and engine, alternator status information on the back-lit LCD screen, illuminated LED's, remote PC's and via SMS text alerts (with external communication device).



1. Control Module **DSE7320 MKII**
2. Alarm Button



3. Enclosure **Galvanneal**
4. Battery Charger **DEEPSEA**

### COMPARISOR

### DSE4520 MKII DSE6320 MKII DSE7320 MKII DSE8620 MKII

#### GENSET AND MAIN READING

Voltage between PH-PH / N-PH	Yes	Yes	Yes	Yes
PF, Hz, kVA, kW, kVAR, A	Yes	Yes	Yes	Yes

#### ENGINE READING AND ALARM

High coolant temperature	Yes	Yes	Yes	Yes
Low oil pressure, coolant level, fuel level	Yes	Yes	Yes	Yes
Unexpected shutdown and Stop failure	Yes	Yes	Yes	Yes
Low battery Voltage	Yes	Yes	Yes	Yes
Battery charging alternator failure	Yes	Yes	Yes	Yes
Over and under speed	Yes	Yes	Yes	Yes
Start failure and emergency stop	Yes	Yes	Yes	Yes

#### ALTERNATOR READING AND ALARM

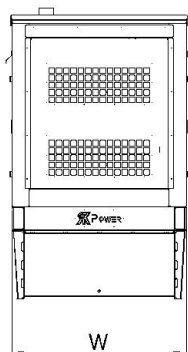
Overload, Over and Under Frequency	Yes	Yes	Yes	Yes
Over, Under and Unbalanced voltage	Yes	Yes	Yes	Yes
Short circuit and reverse power	Yes	Yes	Yes	Yes

#### CONNECTIVITY AND PARALLEL

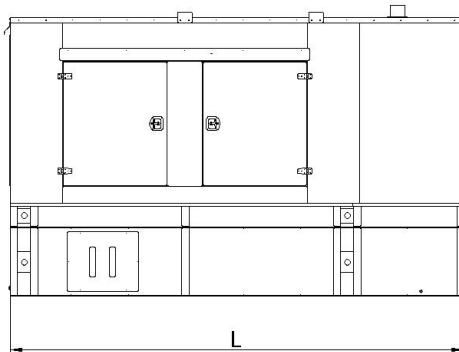
USB, ECU	Yes	Yes	Yes	Yes
RS232	No	No	Yes	Yes
RS485, DSENET	No	Yes	Yes	Yes
USB HOST, Ethernet RJ45	No	No	No	Yes
Parallel function	No	No	No	Yes

## Dimensions, Weight and Sound Level

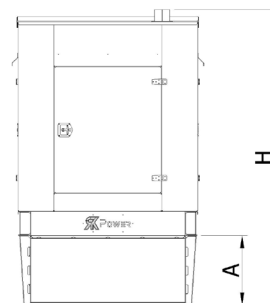
Level 2 | Intake Air View



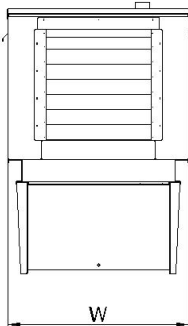
Level 2 | Lateral View



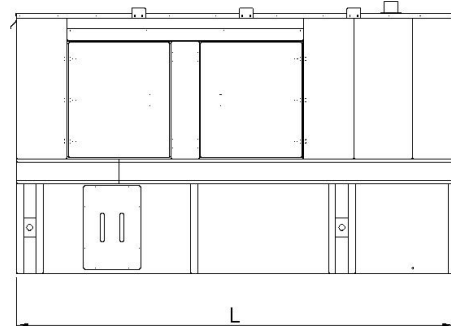
Level 2 | Exhaust View



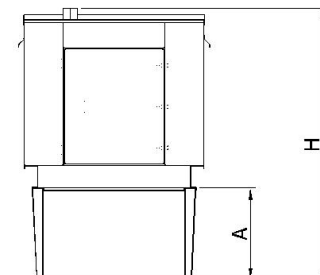
Level 3 | Intake Air View



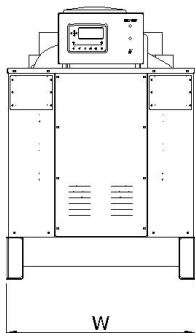
Level 3 | Lateral View



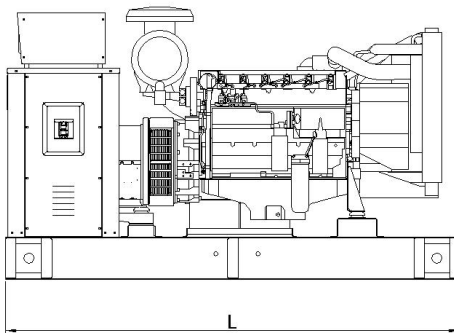
Level 3 | Exhaust View



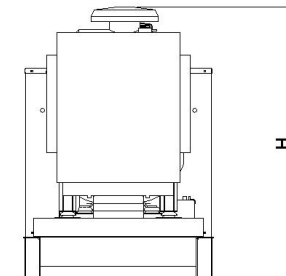
Opentype | Control Panel View



Opentype | Lateral View



Opentype | Radiator View



- Level 2 enclosures include sound attenuation foam (one layer).
- Level 3 enclosures include sound attenuation foam (two layers).
- Enclosure manufactured in **Aluminum** with a wind rating of **170 MPH**, according to **IBC 2018** and **ASCE/SEI7-16** standards.
- Generator assembly in accordance with **UL2200** listed.

Enclosure	Fuel Tank	Autonomy (hr)	Length (L)	Width (W)	Dimensions, in		Tank (A)	Exhaust (Ø)	Weight	Sound Level
					Height (H)				lb	dB(A)@23ft
Level 3	850USG	45	192	68	96		24	6	17000	73
Level 3	1300USG	69	192	68	106		34	6	17200	77
Level 2	850USG	45	192	74	109		24	6	13400	77
Level 2	1300USG	69	192	74	120		34	6	13600	77
Opentype	100USG Daytank	-	144	64	78		-	6	11200	87
Opentype	-	-	144	64	72		-	6	11000	87

- All measurements are approximate and are provided for estimation purposes only. Weights do not include fuel weight.
- Sound levels are measured at **23 feet (7 meters)** in accordance with **ISO 8528-10**.
- **Double Wall** Fuel Tank manufactured in Steel according to **UL142 Listed**.

## Standard **Features**

### ENCLOSURE

- Aluminium Material
- Stainless steel door hinges
- Stainless steel lockable handles
- Polyurethane sound-attenuating foam
- Gasketed doors
- Rain protection visor

### EXHAUST SYSTEM

- Galvanneal Material
- Rain Cap (Exhaust outlet)
- Critical Grade Muffler (enclosed only)
- Stainless Steel flexible exhaust connection

### FUEL TANK

- Mild Steel Material
- Mechanical Fuel Gauge
- Internal wall drainage fitting
- External wall drainage fitting
- Spare: Coupling 3/8" NPT Suction / Return
- Spare: 2" NPT male nipple
- Spare: 2" NPT Female Coupling

### ALTERNATOR

- Class H insulation material
- 2/3 Pitch
- Brushless Excitation

### GENERATOR SET

- Internal Genset Vibration Isolation
- Emergency Stop Button
- Heavy Duty Battery
- Standard Factory Test
- 2 years/2000 hours operational warranty

### ENGINE

- Oil Drain Valve
- Coolant Drain Valve
- Flexible Fuel Line - NPT Connection
- Air cleaner
- SAE 3-11 1/2

## Configurable **Options**

### GENERATOR SET

- Open Type
- Mobile Type
- Antiseismic Isolators

### ENCLOSURE

- Stainless Steel Material
- Removable Doors

### FUEL TANK

- Stainless Steel Material
- Digital Fuel Gauge
- Low / High Fuel Alarms
- Rupture Switch
- External Main Fuel Tank
- External Daytank

### EXHAUST SYSTEM

- Stainless Steel Material Muffler
- Critical Exhaust Muffler (Open Set Only)

### ELECTRICAL SYSTEM

- Battery Charger 2 units parallel for 10A

### ENGINE

- Kit Spare Parts
- Fluid Containment Pan

### ALTERNATOR

- Upsize Alternator
- Droop CT for Parallelism
- Heater anticondensation 120V
- AVR Digital

### CIRCUIT BREAKER

- Electronic: trip unit 40-100% rated
- Motorized Circuit Breaker for Parallelism

### CONTROL SYSTEM

- DSE8620 - Parallel controller
- DSE890 - Remote Communication
- Remote Annunciator

### AUTOMATIC TRANSFER SWITCH (ATS)

- Switch 100-3000A
- Enclosure NEMA 3R / Galvanneal
- Enclosure NEMA 4X / Stainless Steel
- Enclosure NEMA 1