

# MODEL RKY20KB

Standby/Prime 20 kW / 18 kW







#### **SOUNDPROOF GENSET**



Referential image

## **RATINGS**

Voltage (L-L)		240V	208V	240V	480V
Phase		1PH	3 PH	3 PH	3 PH
Power factor	Cos Phi	8.0	0.8	0.8	0.8
Frecuency	Hz	60	60	60	60
Controlator	Deepsea	6320 MKII	6320 MKII	6320 MKII	6320 MKII
Breaker	Siemens	3VA5	3VA5	3VA5	3VA5
Engine	Kubota	V2203-ME3BG	V2203-ME3BG	V2203-ME3BG	V2203-ME3BG
Alternator	Stamford	S0L2-M	S0L2-M	S0L2-M	S0L2-M
Connection		Dedicated	12 Lead low	12 Lead serie delta	12 Lead high delta
STANDBY					
Power	KW	20	20	20	20
Power	KVA	20	25	25	25
Amperage	A	83	70	60	30
PRIME					
Power	KW	18	18	18	18
Power	KVA	18	22.5	22.5	22.5
Amperage	Α	29	62	54	27

#### Certifications and standards

- **EPA Tier 4** (refer emissions certified)
- IBC 2018 and ASCE/SE17-16 optional (refer to seismic Certification)
- **UL 2200** (refer to System ratings for availability and assembly)
- **UL 142** (refer to aboveground tank)
- Generator set tested to **ISO 8528-5** for transient response
- Verified product design, quality, and performance integrity
- All engine systems are prototype and factory tested

#### **Warranty Polity**

- Engine and Assembly Warranty for a period of 2 years or 2,000 hours of operation
- Electrical Components Warranty for a period of 2 years or 2,000 hours of operation  $\,$

**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.



# Specifications of aplication

## **ENGINE**

Manufacturer	Kubota	Displacement	L (in <sup>3</sup> )	2.197 (134.1)
Model	V2203-M-E3BG3	Bore x stroke	mm (in)	87x92.4 (3.43x3.64)
Configuration	4 cylinders in line	Frecuency	Hz	60
Governor	mechanical centrifugal	Velocity	RPM	1800
Certification EPA	Tier 4	Compression ratio		22:1

#### **FUEL SYSTEM**

#### **AIR REQUIREMENTS**

Fuel suction fitting	5/8" NPT Female	Type aspiration	Natu	ıral aspiration
Fuel return fitting	1/2" NPT Female	Airflow for radiator cooling	m3/min(CFM)	1.658(46.8)
Injection type	Indirect injection	Intake airflow	m3/min(CFM)	1.74(61.5)

## OIL SYSTEM

#### **EXHAUST SYSTEM**

Oil capacity	L (gal)	7.56 (2)	Maximum exhaust back pressure	kPa (in. H2 0)	8 (47)
Oil pressure	psi (kPA)	23 (43)	Gas volume at stack temp	m3/min(CFM)	4.76(168)
Lube oil specification	SAI	E 15W-40	Gas temp. (stack)	°C (°F)	510 (950)

## **COOLING SYSTEM**

#### **ELECTRIC SYSTEM**

Coolant capacity	L(gal)	8.1 (2.14)	Electric volts	Volt DC	12
Ambient capacity of radiator	°C (°F)	50 (122)			

# **FUEL CONSUMPTION**

STANDBY

**At 100% load L/hr (gal/hr)** 6.61(1.75)

Max. Restriction of Cooling Air kPa (in. H20) 0.12 (0.5)



# Specifications of **alternator**

# GENERAL DATA

# 60 Hz

Manufacturer		Stamford
Model		SOL2-M
Capacity of overload		(+/- 1.5% of rated capacity)
Bearing	N°	1
Polos	N°	4
Insulation standby- prime	Clase	Н
Enclosure (according IEC-34-5)		IP23
Temp. Rise Standby - prime	°C	150/40-125/40
AVR		AS540 Regulation of voltage (+/- 1%)
Evoitor system		Salf Evaited

**Exciter system** Self Excite





# Specifications of control panel

 $\textbf{Deepsea 6320} \ \ \text{has the capability of automatic and manual}$ start. Digital readings include: voltage between each phase and neutral, voltage between phases, amps per phase, frequency, power in kW and kVA, power factor, accumulated kWh on a daily, monthly, and annual basis, fuel reserve, oil pressure, coolant temperature, battery voltage, and alternator charge voltage, engine speed, and operating hours. Engine alarms include high coolant temperature, low oil pressure, emergency stop activated, battery charge failure, low coolant level, low fuel level, overspeed, insufficient speed, and low battery voltage.

#### Alarm of engine

High coolant temperature, low oil pressure, low coolant level, unexpected shutdown, low fuel level, stop failure, low battery voltage, battery charge alternator failure, overspeed, insufficient speed, startup failure, and emergency shutdown. Support for engines with an electronic control unit (ECU) (J1939, Modbus, and other proprietary interfaces); alarm codes displayed in text form.

#### Alarm of alternator

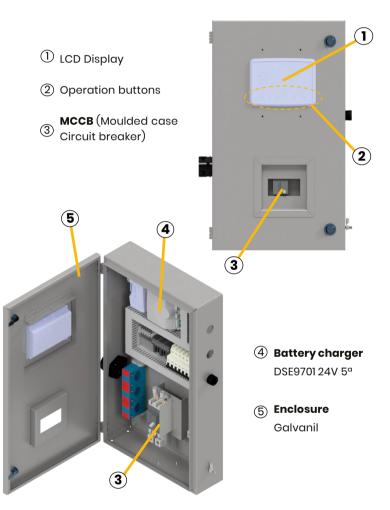
Overload, voltage imbalance, overvoltage, undervoltage, overfrequency, underfrequency, short circuit, and reverse power.



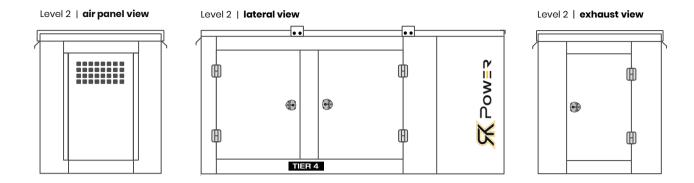
#### **Main Features**

- Multilingual display
- Automatic start on power grid failure
- Engine runtime can be recorded for ease of maintenance and repair of the unit
- User-friendly button configuration and layout
  The LCD screen can display multiple parameters simultaneously
  Compatible with electronic fuel injection (EFI) engines

- IP65 rating
  Configuration via PC and front panel
  Fully configurable via PC using USB, RS232, and RS485 communication
- Data recording and trend analysis
- Support for sensors from 0 V to 10 V and from 4 mA to 20 mA
  Compatible with a wide range of CAN engines

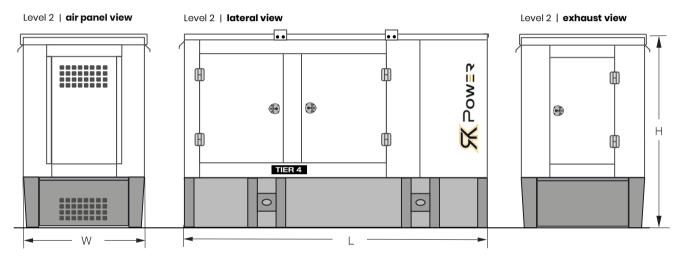






Level 2 enclosures include sound attenuation foam (one layer).

Enclosure manufactured in aluminum and with a wind rating of 150 MPH, certified according to IBC2018 and ASCE/SEI7-16 standards.



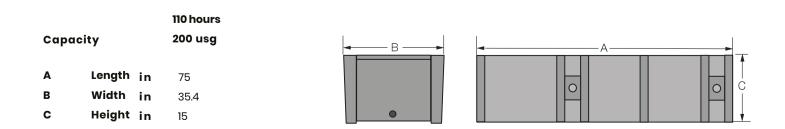
All measurements are approximate and are provided for estimation purposes only. Weights do not include fuel weight. Sound levels are measured at 23 feet (7 meters) and do not take into account the environmental conditions of the site.

UL 2200 certified for generator assembly - optional

# Dimensions, weight and level sound

	Length (in)	Width(in)	Height(in)	Weight (lb)	<b>Level sound</b>
_	L	W	Н		dB(A)@7m
Soundproof genset					
Level 2	75	35.4	69	2,600	63+/- 2

# Sub-base tank double wall

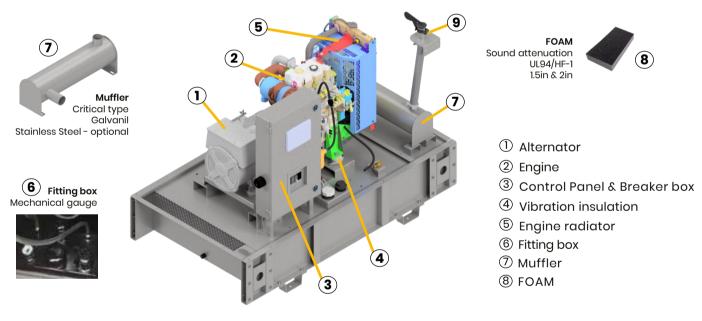




# External parts of a standard soundproof genset



# Intern parts of a standard soundproof genset



# Optional configuration

#### Generator

- Movil type
- Open type
- Seismic insulators

#### **Breaker**

- ABB or SIEMENS
- Trip unit:
- adjustable
- electrónico

#### **Engine**

• Heater anticondensation

#### **Alternator**

- Heater anticondensation
- AVR PMG MX341

#### **Tank**

- Double wall
- Extern daytank
- Extern tank

#### Additional accessories:

- Level switch alarm
- · Spill detector switch

## Control system

- Automatic transfer switch (ATS)
  - ABB OSEMCO and VITZRO (NEMA 3R, 4X, 12) (Steel, Aluminium, Galvanil or SS)
- · Sincronism system:
- Deepsea DSE8620