

**Generator set**  
**Sound-proof type**  
**SG23KS-AU**

# **SPECIFICATIONS**



# MK series SG23KS-AU



50 Hz @ 1500rpm, 1-phase/3-wiring

## 1 Standards & Conditions

### Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (CE)
- ISO8528-5:2005
- AS 3000-2018
- AS 3010-2017

### Environmental Operating Conditions

- Installation place: Outdoors or indoors (well ventilated).
- Ambient temperature: -25°C to 50°C. The coolant heater is needed when the temperature is below 5°C
- Humidity: Less than 90%.
- Altitude: Below one thousand (1000) meters above sea level.

### Factory Inspection

- Inspection items.
- Protection devices working test.
- Starting ability in normal temperature.
- 50% rated power load moment capability.
- Voltage deviation and speed variation: 0%, 25%, 50%, 75%, 100%, 110% Load.

### Painting Process

- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

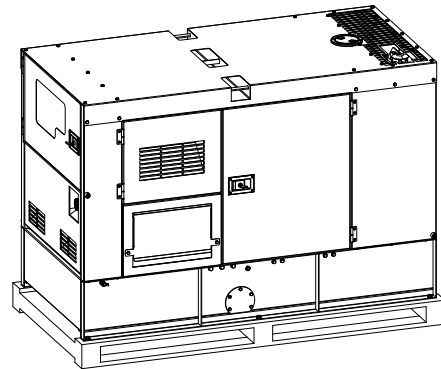
## 2 General Features

- Kubota engine V2403-M-DI-BG
- Close coupled to Leroy Somer alternator LSA42.3S5
- Microprocessor control module PLC-920
- SCHNEIDER main circuit breaker: 125A
- Rotate speed governor: Electrical governor
- Excitation system: Self excited, SHUNT
- A.V.R model: SX440
- Key switch
- Emergency stop switch
- ATS(automatic transfer switch)receptacle

- Remote run connector
- 1x12V/60AH sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy
- 45°C radiator
- Steel base frame
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 20 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

## 3 Equipment

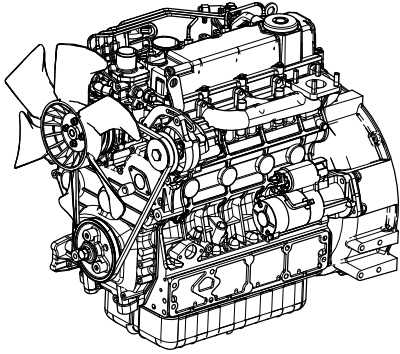
### General technical data



Model..... SG23KS-AU  
 Tank capacity.....110L  
 Dry weight.....784 kg  
 Sound pressure level @ 7m..... 61.0dBA  
 Dimensions L×W×H.....1805x725x1206mm  
 Standby Power ..... 25kVA/20kW  
 Prime Power ..... 23kVA/18kW

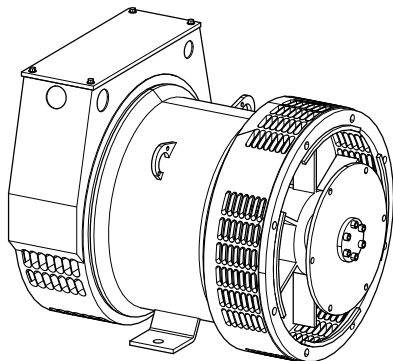
Voltage	220V	230V	240V			
Ampere	95.8A	100A	104.5A			
<b>Genset Fuel Consumption</b>						
Frequency/Load	25%	50%	75%	100%	110%	
50Hz (L/h)	1.375	2.75	4.1	5.5	6.05	

## Diesel engine



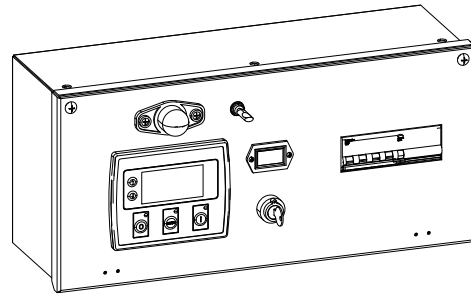
Engine Manufacturer/Brand.....	KUBOTA
Engine Model.....	V2403-M-DI-BG
Dimensions L×W×H.....	706.4×492×682.5mm
Dry Weigh (approx.) .....	241kg
Number of Cylinders.....	4
Bore.....	98mm
Stroke.....	110mm
Displacement.....	2.2L
Compression Ratio.....	19.6
Type of Injection .....	Direct injection
Intake System.....	Natural aspirated
Intake Resistance.....	1.96kPa
Cooling System .....	Water cooled
Fan .....	Pusher
Battery Voltage.....	12V
Type of Fuel.....	Diesel Fuel No.2-D(ASTM D975)
Type of Oil .....	Class CF lubricating oil
Oil Capacity .....	9.7L
Type of Coolant .....	Glycol mixture
Coolant Capacity.....	N/A
Back Pressure.....	≤7.07kPa
Standby Power.....	22.8kW
Prime Power.....	20.7kW
Fuel Consumption(100%load).....	5.5L/h

## Alternator



Alternator Manufacturer/Brand .....	Leroy Somer
Alternator Model .....	LSA42.3S5
Exciter.....	Brushless
Cooling Fan .....	Cast alloy aluminum
Windings.....	100% copper
Insulation Class .....	H
Winding Pitch.....	2/3
Terminals .....	12
Drip Proof .....	IP23
Altitude.....	≤1000m
Overspeed .....	2250rpm
Air Flow.....	N/A
Voltage Regulation .....	±1.0%
Total Harmonic TGH / THCat no load < 1.5 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<50

## PLC-920 Control System

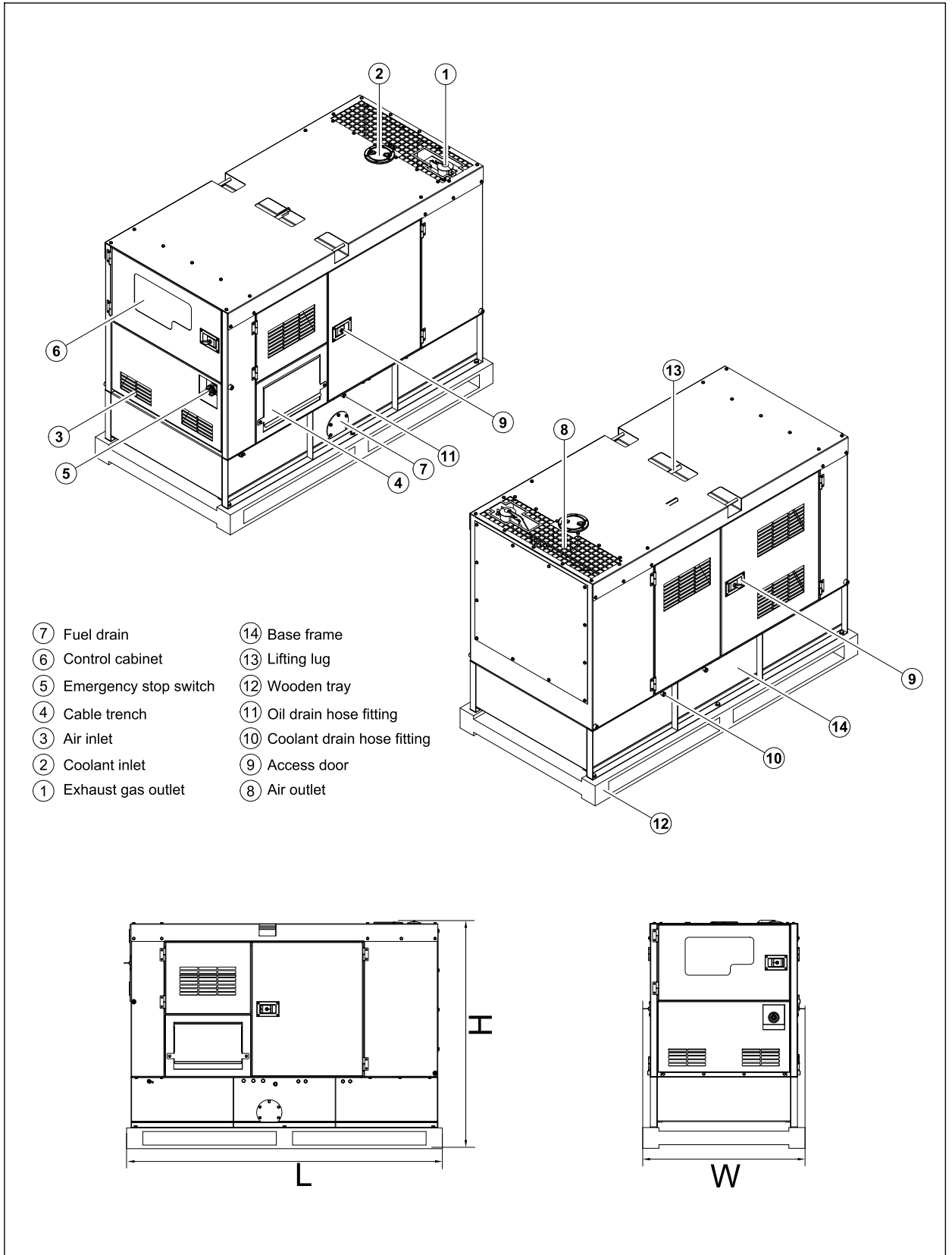


PLC-920 is an advanced control module based on microprocessor designed to control the engine via push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine failure.

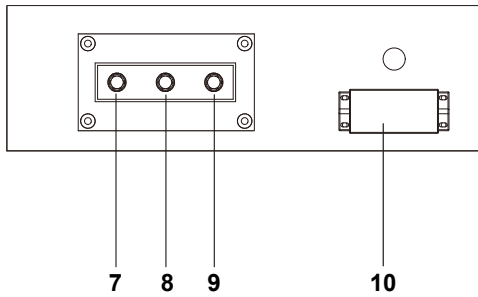
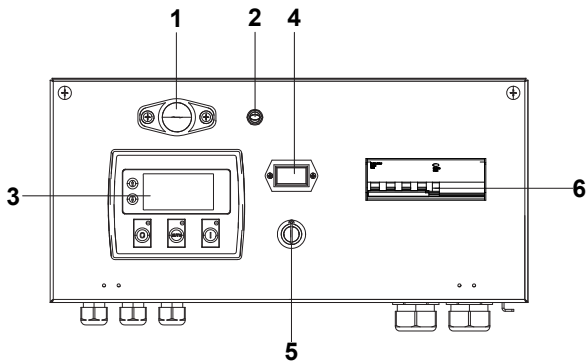
### Standard Control Function

- Manual Engine Control Module
- Low Oil Pressure
- High Engine Temperature
- Auxiliary Shutdown
- Overspeed Protection
- Protection hold-off timer
- Charge Failure warning

## 4 Overall Dimensions

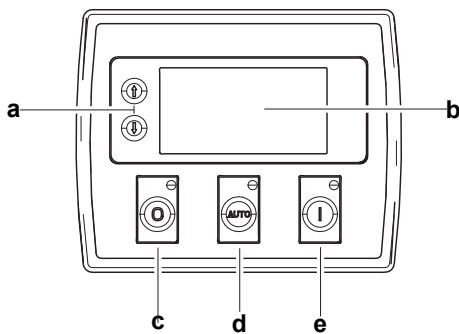


## 5 Control System



**Control & field wiring cabinet**

Ref.	Description
1	Control cabinet lamp
2	Control cabinet lamp switch
3	Control module
4	Time counter
5	Key switch
6	Main circuit breaker
7	Live wire terminals
8	Neutral wire terminal
9	Ground wire terminal
10	Mains input/remote communication connector



**Control module**

Ref.	Description
a	Navigation button«» Accept (Configuration mode only)
b	Main status display
c	Stop/reset button«» Next page (Configuration mode only)
d	Auto start button«» Decrease value/next item (Configuration mode only)
e	Start button«» Increase value/next item (Configuration mode only)

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*Specification may change without prior notice. For more info.,  
contact Power Link or your local distributors please.*