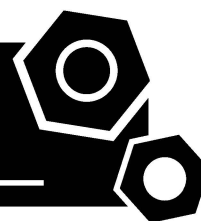


Generator set
Sound-proof type
SG45KS-AU

SPECIFICATIONS



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.

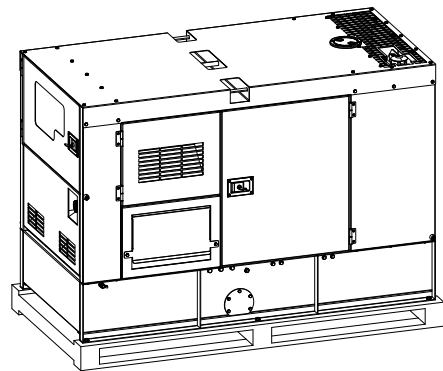
2 General Features

- Kubota engine V3800DI-T-BG
- Close coupled to LSA alternator LSA44.3S3
- Microprocessor control module PLC-920
- SCHNEIDER main circuit breaker: 225A
- Rotate speed governor: Mechanical governor
- Excitation system: Self excited, SHUNT
- A.V.R model: R250
- 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 23 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment

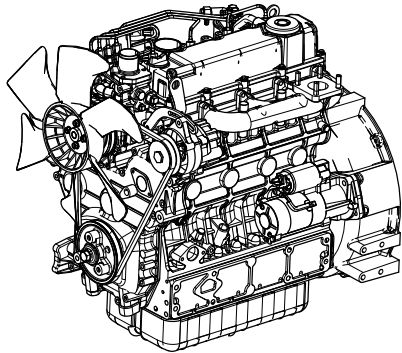
General technical data



Model..... SG45KS-AU
Tank capacity..... 250L
Dry weight..... 1320kg
Sound pressure level @ 7m 66.0dBA
Dimensions L×W×H..... 1680x700x980mm
Standby Power 50kVA/40kW
Prime Power 45kVA/36kW

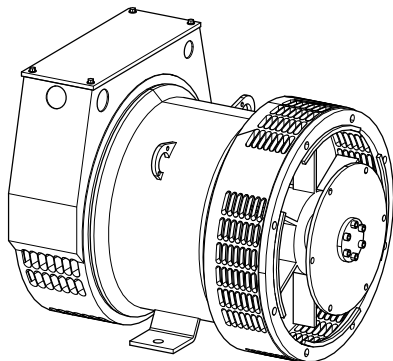
Voltage	220V	230V	240V		
Ampere	204.5A	195.7A	187.5A		
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	N/A	5.4	8.2	10.7	11.8

Diesel engine



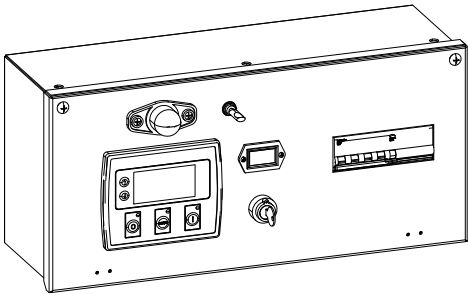
Engine Manufacturer/Brand.....	KUBOTA
Engine Model.....	V3800DI-T-BG
Dimensions L×W×H.....	745×549×794mm
Dry Weigh (approx.)	288kg
Number of Cylinders.....	4
Bore.....	100mm
Stroke.....	120mm
Displacement.....	3.769L
Compression Ratio	19.0
Type of Injection	Direct injection
Intake System.....	Turbocharged
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	13.2L
Type of Coolant	Glycol mixture
Coolant Capacity	8.2L
Back Pressure	≤7.07kPa
Standby Power	42.7kW
Prime Power.....	38.8kW
Fuel Consumption(100%load).....	10.7L/h

Alternator



Alternator Manufacturer/Brand	Leroy Somer
Alternator Model	LSA44.3S3
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

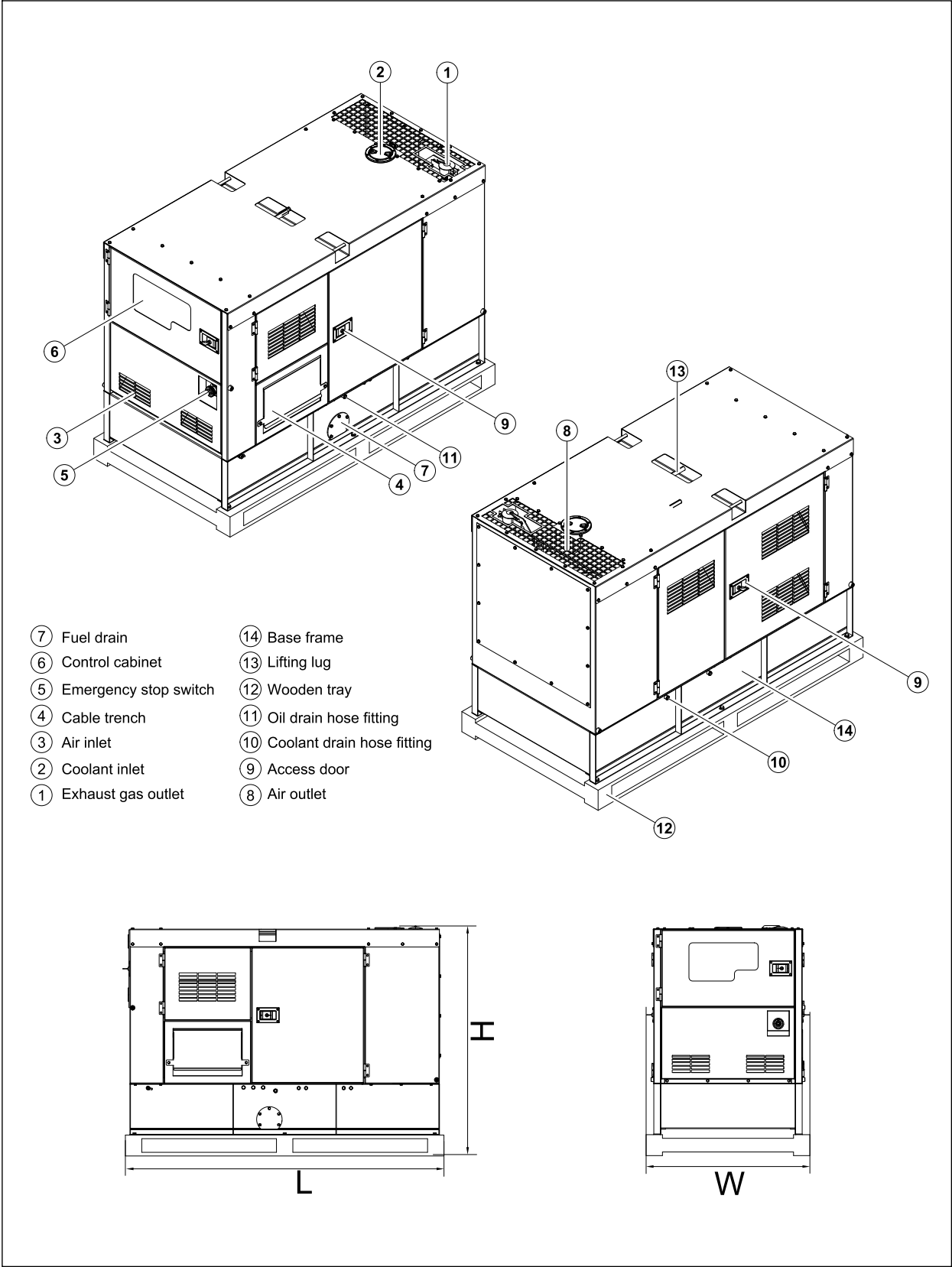


PLC-920 is an advanced control module based on microprocessor designed to control the engine via push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine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

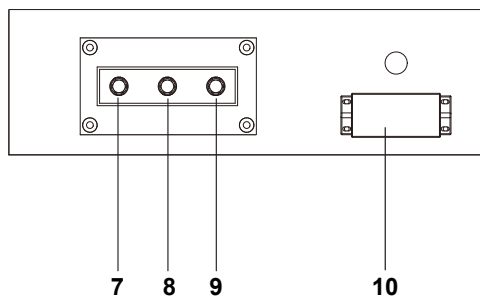
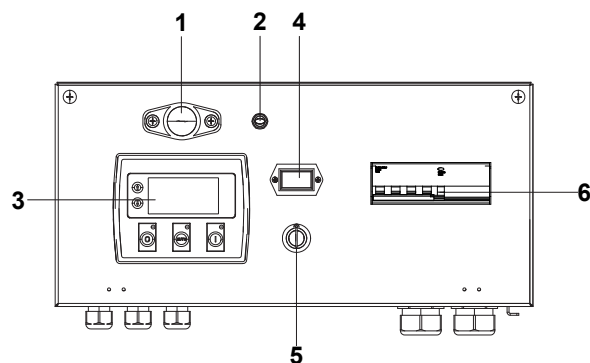
Standard Control Function

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

4 Overall Dimensions

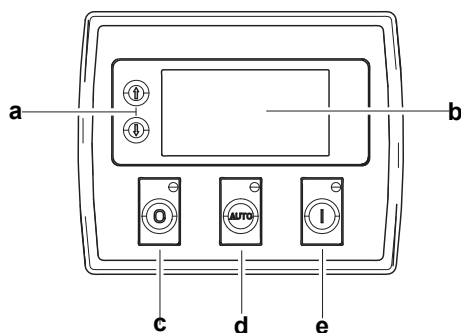


5 Control System



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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10.2020