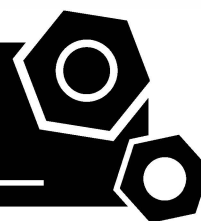


Generator set
Sound-proof type
GMS20KS-AU

SPECIFICATIONS



1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (CE)
- ISO8528-5:2005
- GB/T2820.5-2009
- 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.

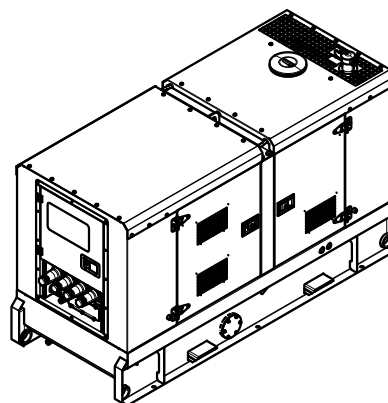
2 General Features

- Kubota engine V2203-BG
- Close coupled to LSA alternator LSA40M5
- Microprocessor control module PLC-920
- SCHNEIDER main circuit breaker: 32A
- Rotate speed governor: Mechanical governor
- Excitation System: Self excited
- A.V.R
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- Convenience receptacles: 3P and 1P

- 1x12V/72AH sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy
- 50°C radiator
- Oil pump on the engine
- Steel base frame with forklifts
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 25 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

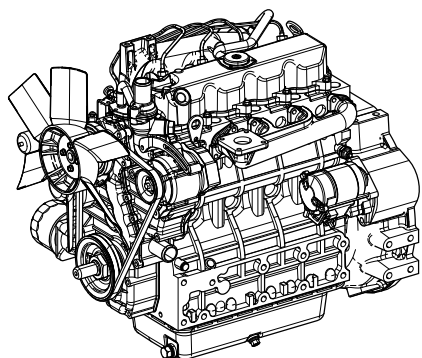
General technical data



Model.....GMS20KS-AU
 Structure typeRS
 Tank capacity..... 140L
 Dry weigh.....871kg
 Noise level @7m 65.1dBA
 Dimensions L×W×H..... 2132x928x1304mm
 Standby Power 22kVA/18kW
 Prime Power 20kVA/16kW

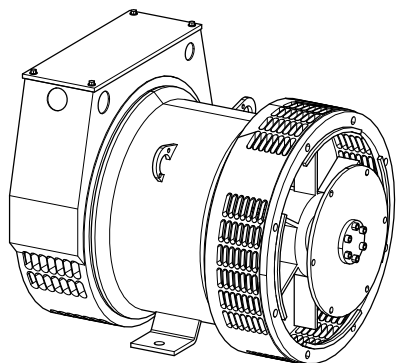
Voltage	380V	400V	415V	440V	
Ampere	30.4A	28.9A	27.8A	26.2A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	N/A	2.8	4.1	5.5	6.1

Diesel engine



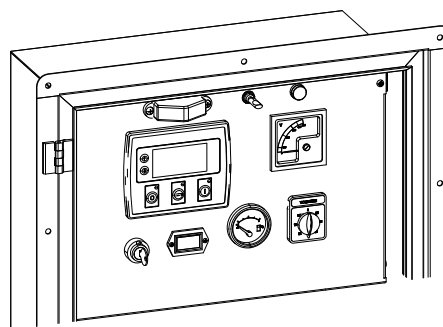
Engine Manufacturer/Brand.....	KUBOTA
Engine Model.....	V2203-BG
Dimensions L×W×H.....	608.4×548.3×642.8mm
Dry Weigh (approx.)	148kg
Number of Cylinders.....	3
Bore.....	87mm
Stroke.....	92.4mm
Displacement.....	1.647L
Compression Ratio.....	23
Type of Injection	Direct injection
Intake System.....	Natural aspirated
Intake Resistance.....	1.96kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12V
Type of Fuel.....	No.2-D(ASTM D975)
Type of Oil	Class CF lubricating oil
Oil Capacity	7.6L
Type of Coolant	Glycol mixture
Coolant Capacity	7.1L
Back Pressure	≤7.07kPa
Standby Power	18.1kW
Continuous Power	15.0kW
Fuel Consumption(100%load).....	5.5L/h

Alternator



Alternator Manufacturer/Brand	Leroy Somer
Alternator Model	LSA40M5
Exciter.....	Brushless
Cooling Fan	Synthetic plastic
Windings.....	100% copper
Insulation Class	H
Winding Pitch.....	2/3
Terminals	12
Drip Proof	IP23
Altitude.....	≤1000m
Overspeed	2250rpm
Air Flow.....	0.11 m³/s(50Hz),0.135m³/s(60Hz)
Voltage Regulation	±0.5 %
Total harmonic TGH / THCat no load < 1.5 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<50

PLC-920 Control System

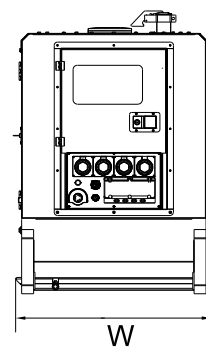
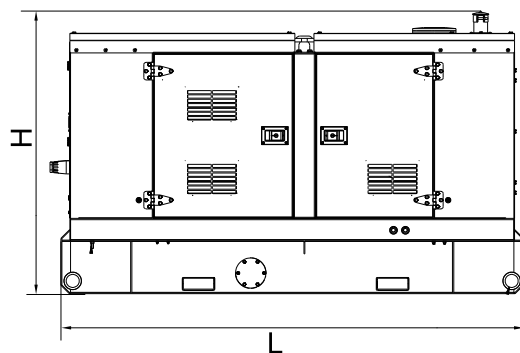
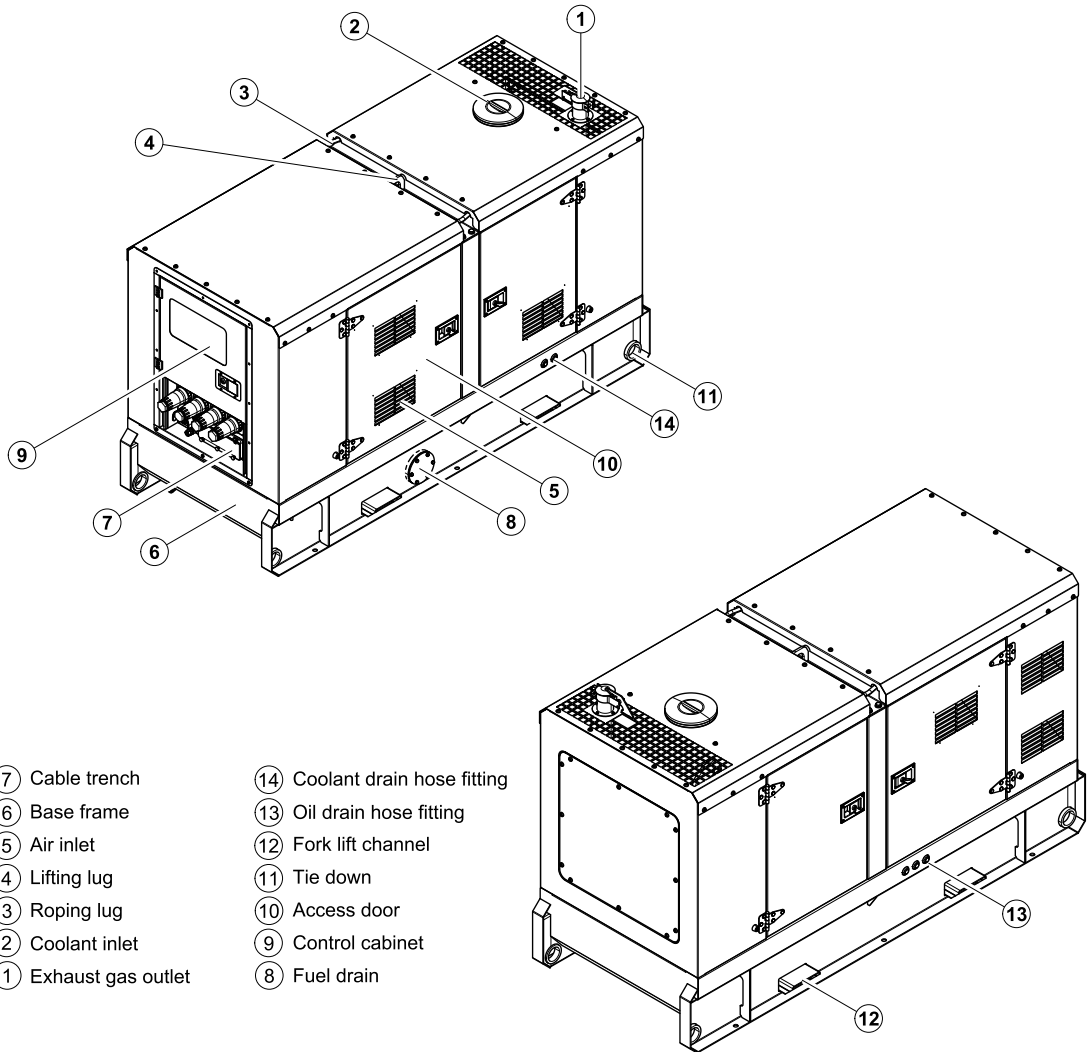


PLC-920 is an advanced control module based on microprocessor designed to control the engine via push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine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

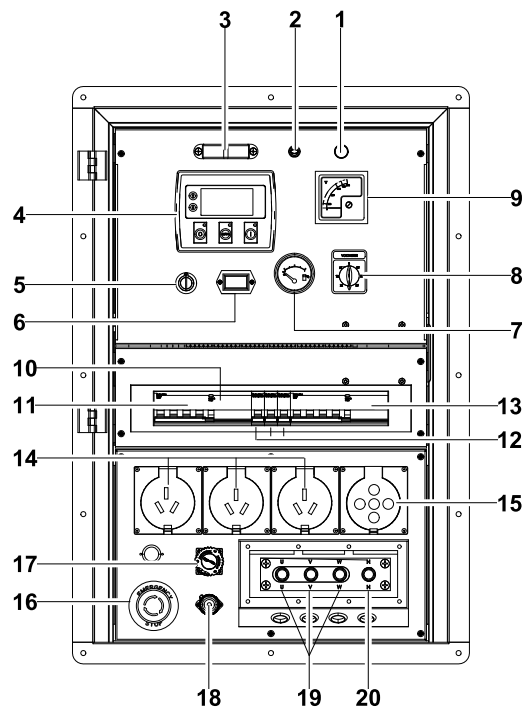
Standard Control Function

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

4 Overall Dimensions

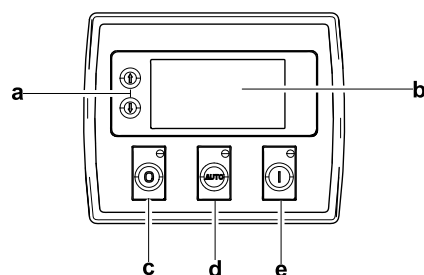


5 Control System



Control & field wiring cabinet

Ref.	Description
1	Charge indicator
2	Control cabinet lamp switch
3	Control cabinet lamp
4	Control module
5	Key switch
6	Time counter
7	Fuel level meter
8	Voltmeter change-over switch
9	Voltage meter
10	RCD.
11	Circuit breaker of three-phase convenience receptacle
12	Circuit breakers of single-phase convenience receptacle
13	Main circuit breaker
14	3x single-phase convenience receptacle
15	1x three-phase convenience receptacle
16	Emergency stop switch
17	Remote control/ ATS communication connector
18	Mains input/ Remote control communication connector
19	Live wire terminals
20	Neutral wire terminal



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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