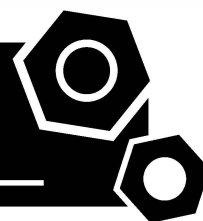


Generator set
Sound-proof type
PK20S-AU

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.

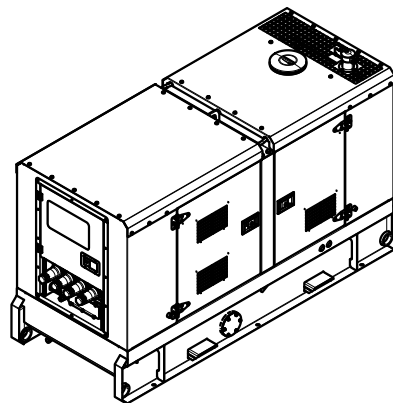
2 General Features

- Kubota engine V2203-BG
- Close coupled to LSA alternator LSA42.3S4
- Microprocessor control module PLC-920
- SCHNEIDER main circuit breaker: 100A
- Rotate speed governor: Mechanical governor
- Excitation System: Self excited
- A.V.R
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- Convenience receptacles: 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

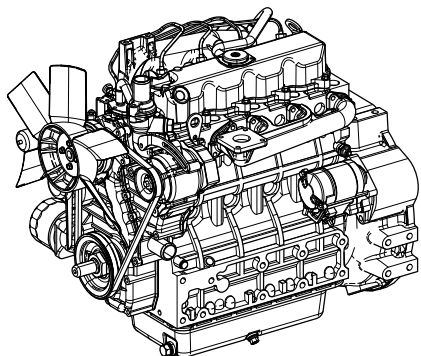
General technical data



Model.....PK20S-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

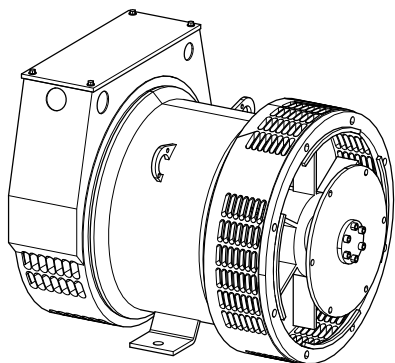
Voltage	220V	230V	240V		
Ampere	90.9A	87.0A	83.3A		
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	N/A	2.8	4.1	5.5	6.1

Diesel engine



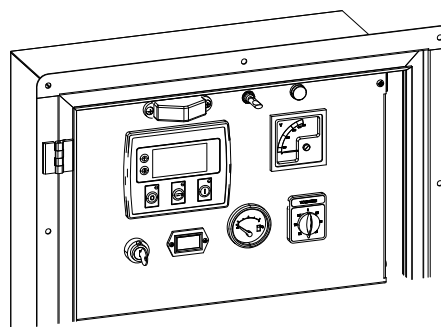
Engine Manufacturer/Brand.....	KUBOTA
Engine Model.....	V2203-BG
Dimensions L×W×H.....	608.4×548.3×642.8mm
Dry Weigh (approx.)	148kg
Number of Cylinders.....	3
Bore.....	87mm
Stroke.....	92.4mm
Displacement.....	1.647L
Compression Ratio.....	23
Type of Injection	Direct injection
Intake System.....	Natural 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	LSA42.3S4
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

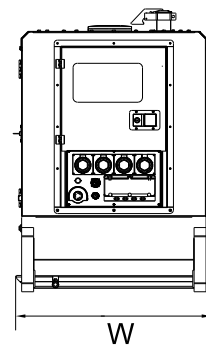
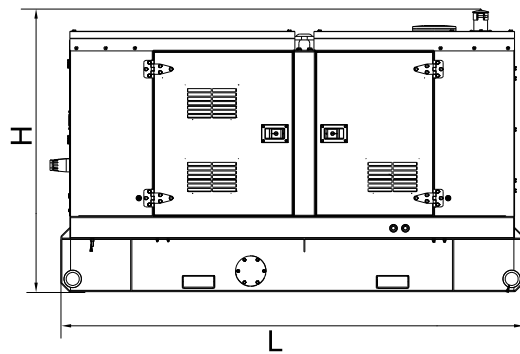
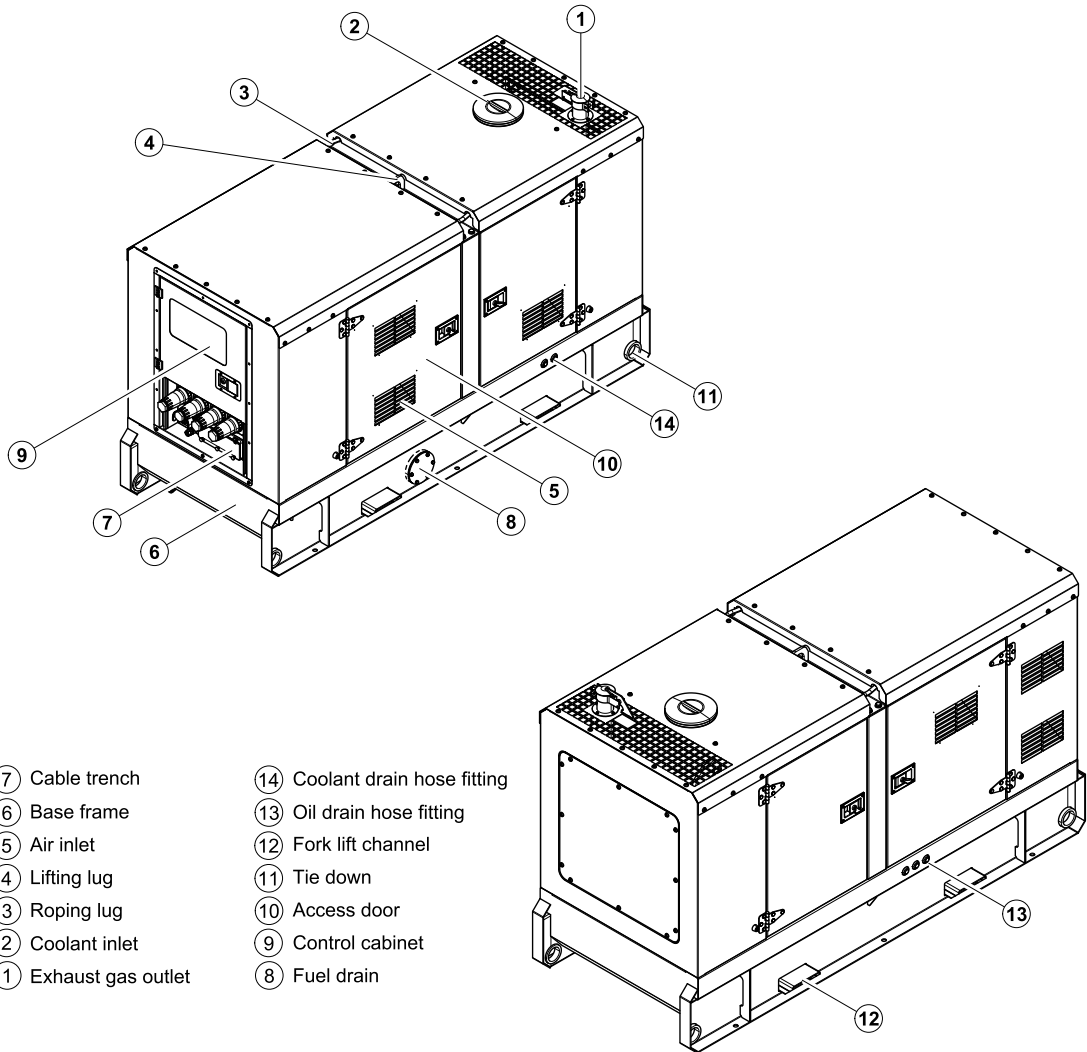


PLC-920 is an advanced control module based on microprocessor designed to control the engine via push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine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

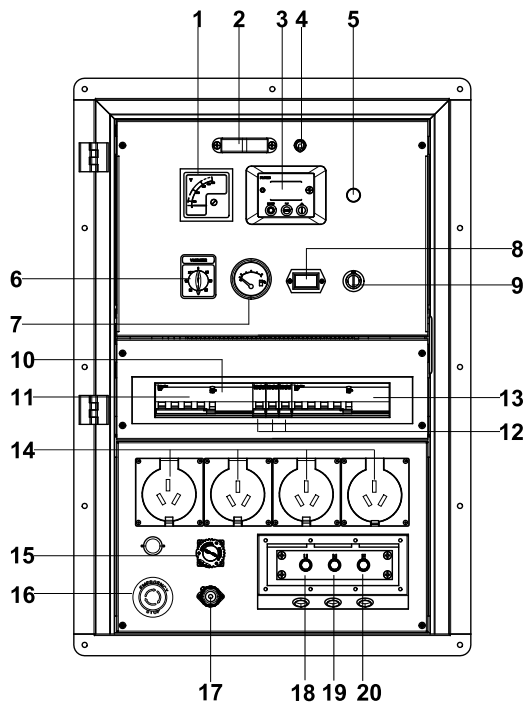
Standard Control Function

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

4 Overall Dimensions

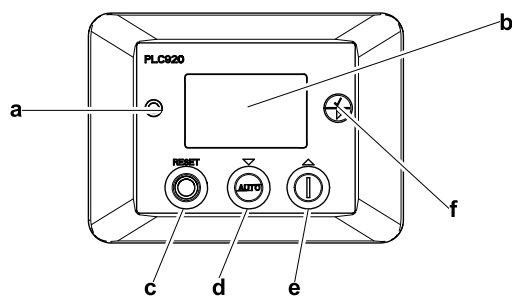


5 Control System



Control & field wiring cabinet

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



Control module

Ref.	Description
a	Alarm indicator
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)
f	Navigation button; Accept (Configuration mode only)

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