

# Generator set Sound-proof type PR9K-S-SAE

## **SPECIFICATIONS**



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Rev. [Feb].[2024]

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



#### 1 Standards & Conditions

#### **Design Standards**

The designs and the productions are in conformity with:

- Conformite Europeenne (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.

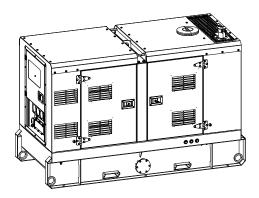
#### 2 General Features

- Kubota engine D1105-BG
- Close coupled to LSA alternator LSA40S3
- Microprocessor control module PLC-920
- SCHNEIDER main circuit breaker: 63A
- · 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 forkslots
- Vibration isolators between the engine/alternator and base frame
- · Dry type air filter
- · Base fuel tank for 28 hours running
- · Drain points for fuel tank
- Operation Manual / Specifications

#### 3 Equipment Specification

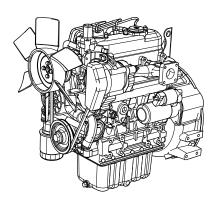
#### General technical data



Model	PR9K-S-SAE
Structure type	RS
Tank capacity	100L
Dry weigh	700kg
Noise level @7m	64.7dBA
Dimensions L×W×H	1932x927x1308mm
Standby Power	11kVA/8.8kW
Prime Power	10kVA/8kW

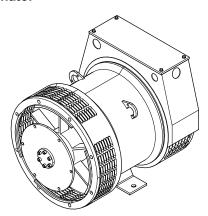
Voltage	220V			230V		24	240V	
Ampere	45.5A			43.5A		41	41.7A	
Genset Fuel Consumption								
Frequency/Load		25%	50%		75%	100%	110%	

#### Diesel engine



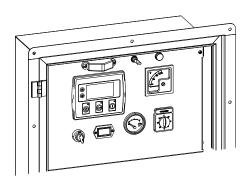
Engine Manufacturer/Brand	KUBOTA
Engine Model	D1105-BG
Dimensions L×W×H	549.3×398.0×604.7mm
Dry Weigh (approx.)	93kg
Number of Cylinders	3
Bore	78mm
Stroke	78.4mm
Displacement	1.123L
Compression Ratio	22
Type of Injection	Direct injection
Intake System	Natural aspirated
Intake Resistance	1.96kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12V
Type of Fuel	No.2-D(ASTMD975)
Type of Oil	Better than API CD class
Oil Capacity	5.1L
Type of Coolant	Glycol mixture
Coolant Capacity	6.4L
Back Pressure	≦7.07kPa
Standby Power	9.5kW
Prime Power	8.4kW
Fuel Consumption(100%load)	3.5L/h

#### **Alternator**



Alternator Manufacturer/Bran	dLeroy Somer
Alternator Model	LSA40S3
Exciter	Brushless
Cooling Fan	Synthetic plastic
Windings	100% copper
Insulation Class	Н
Winding Pitch	2/3
Terminals	12
Drip Proof	IP23
Altitude	≤1000m
Overspeed	2250rpm
Air Flow 0.1	1 m <sup>3</sup> /s(50Hz),0.135m <sup>3</sup> /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

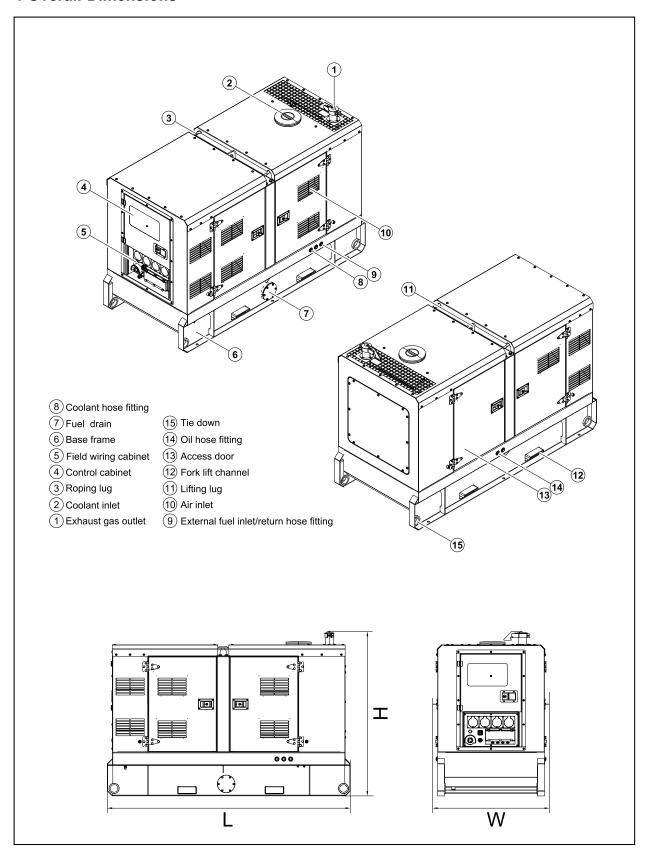


PLC-920 is an advanced control module based on microprocessor designed to control the engine via push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine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

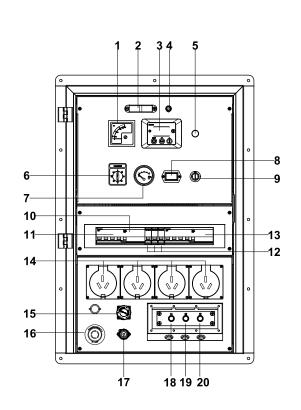
#### **Standard Control Function**

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

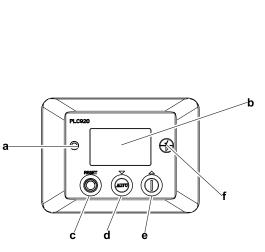
#### **4 Overall Dimensions**



### 5 Control System



Control & field wiring cabinet



**Control module** 

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

Ref.	Description
а	Alarm indicator
b	Main status display
С	Stop/reset button; Next page (Configuration mode only)
d	Auto start button; Decrease value/next item (Configuration mode only)
е	Start button; Increase value/next item (Configuration mode only)
f	Navigation button; Accept (Configuration mode only)