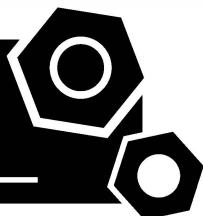


Generator set

Sound-proof type

PR110P-SAE

SPECIFICATIONS



www.prpower.com | 1300 399 499

PR Power reserves the right to make changes
in model, technical specification, color,
configuration and accessories without prior
notice. Please contact the sales team before
ordering.

Rev. [July].[2023]

1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformite Europeenne (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.

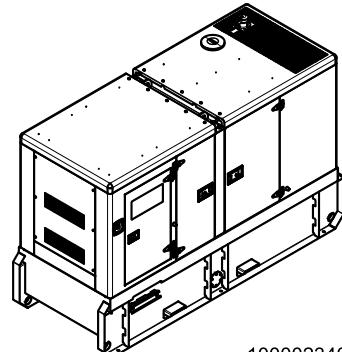
2 General Features

- Perkins engine 1104C-44TAG2
- Close coupled to a Leroy Somer alternator LSA44.3S5
- Microprocessor control module PLC-7420
- ABB main circuit breaker: 160A
- Rotate speed governor: Electronic fuel injection governor
- Excitation System: Self ExcitedSHUNT
- A.V.R.Model: R250
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle

- Remote run connector
- 1x12V/120AH sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy
- 50°C radiator
- Oil pump on the engine
- Non-returning valve for fuel inlet hose of the engine
- Steel base frame with forkslots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 24 hours running
- Drain points for fuel tank
- Breather valve for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

General technical data

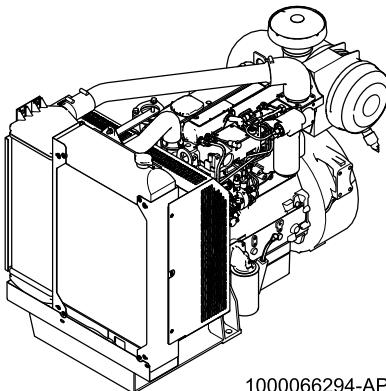


1000023403-AP1-D2

Model.....	PR110P-SAE
Structure type	R
Tank capacity.....	530L
Dry weight.....	1979kg
Noise level @7m	70.1dBA
Dimensions L×W×H.....	2888×1171×1900mm
Standby Power	110kVA/88kW
Prime Power	100kVA/80kW

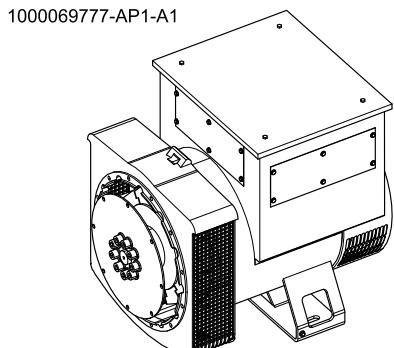
Voltage	415V	440V	460V	480V	
Ampere	139A	131A	126A	120A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	N/A	11.2	17.1	22.6	24.9

Diesel Engine



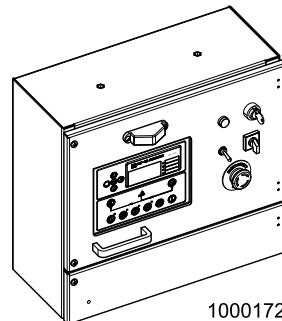
Engine Manufacturer/Brand.....	Perkins
Engine Model.....	1104C-44TAG2
Dimensions L×W×H.....	1259×721×966mm
Dry Weigh (approx.)	401kg
Number of Cylinders.....	4
Bore	105mm
Stroke.....	127mm
Displacement.....	4.4L
Compression Ratio.....	18.23
Type of Injection	Direct
Intake System.....	Turbocharged,air-to-air charge cooled
Intake Resistance.....	≤8.0kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12V
Type of Fuel.....	EPA2D 89.330-96
Type of Oil	API-CC/SE or CCMC-D1
Oil Capacity	8.0L
Type of Coolant	Glycol mixture
Coolant Capacity	12.6L
Back Pressure	≤18kPa
Standby Power	103kW
Prime Power	93.6kW
Fuel Consumption(100%load).....	22.6L/h

Alternator



Alternator Manufacturer/Brand	Leroy Somer
Alternator Model	LSA44.3S5
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.....	0.25m³/s(50Hz),0.3m³/s(60Hz)
Voltage Regulation	±0.5%
Total harmonic TGH / THC at no load < 2 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<50

PLC-7420 Control System

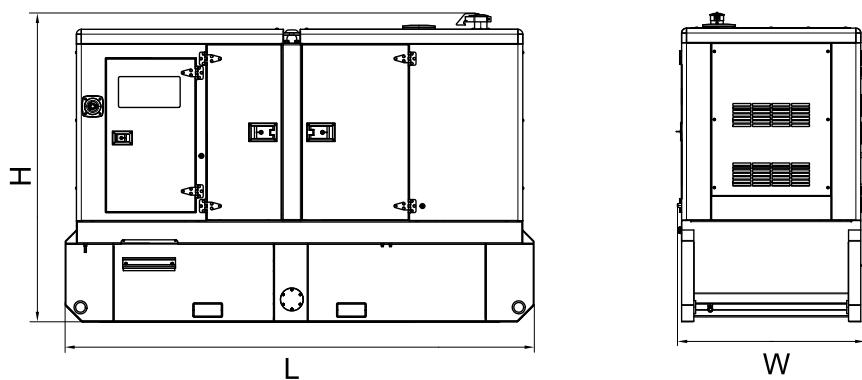
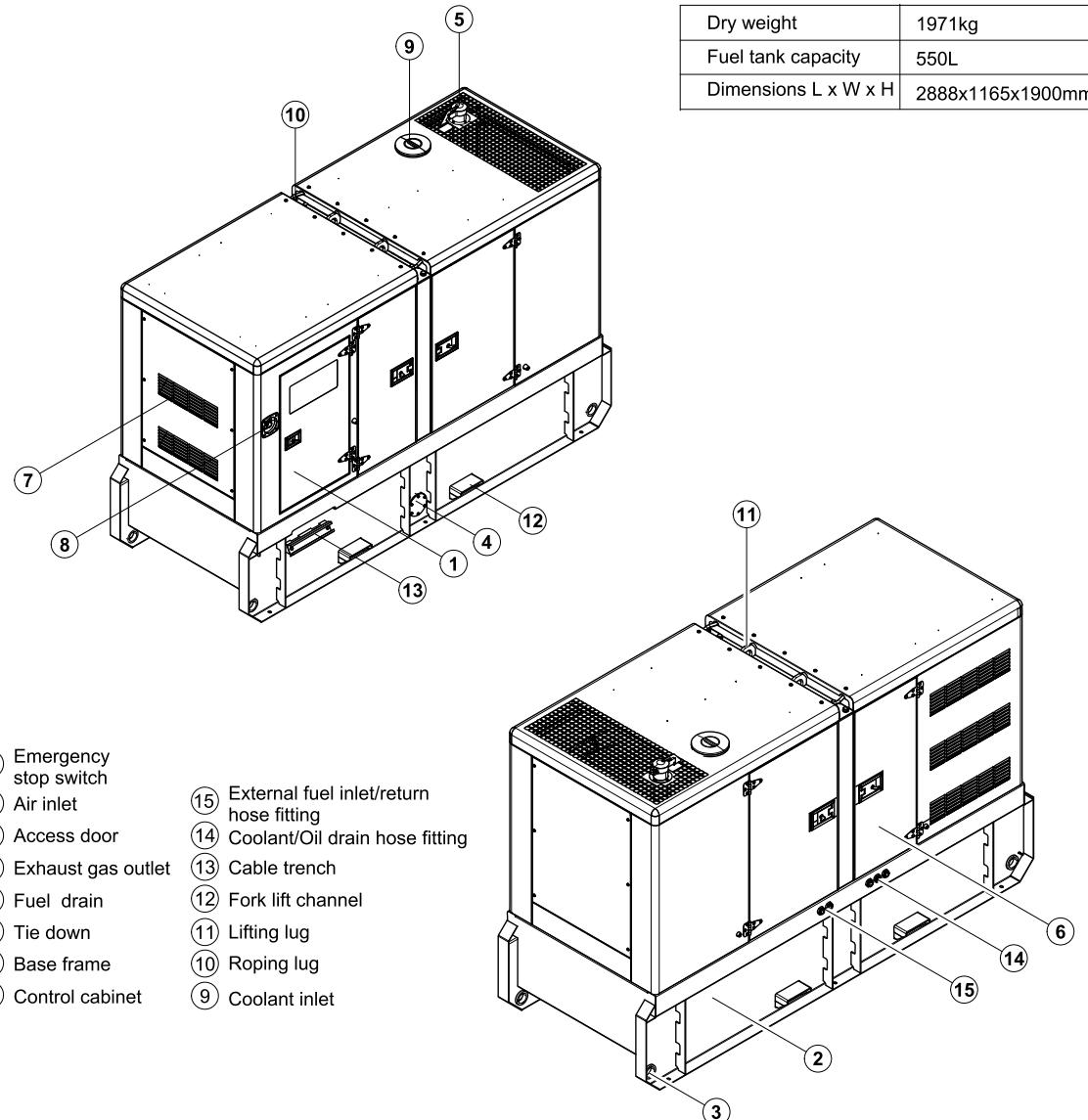


PLC-7420 is an advanced control module based on microprocessor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and display all values and alarms information on the LCD. In addition, the control module can automatically shut down the engine and indicate the engine failure.

- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the mains supply and genset
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Manual, automatic and remote work mode selectable
- Real time clock for time and date display, overall runtime display, 250 log entries
- Overall power output display
- Integral speed/frequency detecting, telling status of start, rated operation, overspeed etc.
- Communication with PC via RS485 OR RS232 interface, using MODBUS protocol

4 Overall Dimensions

1000023403-DR1-D2



5 Control System

