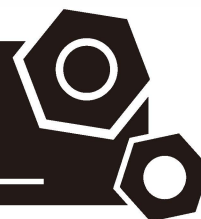


Generator set Sound-proof type PR385P-SAE

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:

- 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.

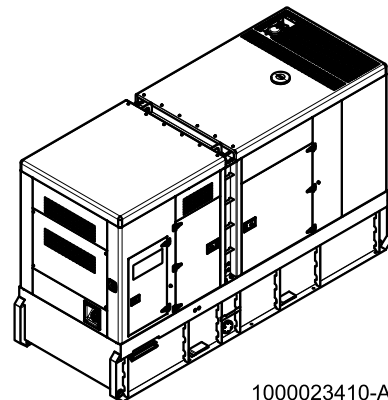
2 General Features

- Perkins engine 2206C-E13TAG2
- Close coupled to a Leroy Somer alternator LSA47.2VS1
- Microprocessor control module PLC-7420
- ABB main circuit breaker: 630A
- Rotate speed governor: Electronic fuel injection governor
- Excitation System: Self Excited, Shunt
- A.V.R.Model: R250
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle

- Remote run connector
- 2x12V/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 forklifts
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 22 hours running
- Drain points for fuel tank
- Breather valve for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

General technical data

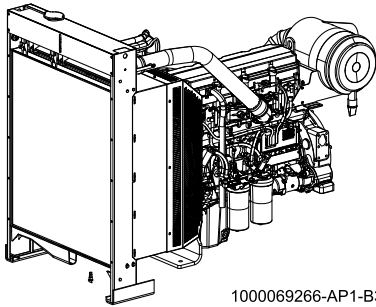


1000023410-AP1-B5

Model.....	PR385P-SAE
Structure type	R
Tank capacity.....	1650L
Dry weight.....	4671kg
Noise level @7m	76.3dBA
Dimensions L×W×H.....	4242x1613x2476mm
Standby Power	385kVA/308kW
Prime Power	350kVA/280kW
Voltage/Current.....	415V/417A

Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	N/A	41	59	76	87

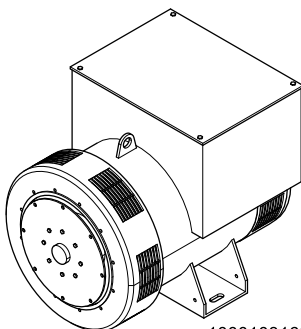
Diesel engine



1000069266-AP1-B3

Engine Manufacturer/Brand.....	Perkins
Engine Model.....	2206C-E13TAG2
Dimensions L×W×H.....	2410×1120×1725mm
Dry Weight (approx.).....	1478Kg
Number of Cylinders.....	6
Bore.....	130mm
Stroke.....	157mm
Displacement.....	12.5L
Compression Ratio.....	16.3
Type of injection.....	Direct injection
Intake System.....	Turbocharged, air-to-air charge cooled
Intake Resistance.....	N/A
Cooling System.....	Water cooled
Fan.....	Pusher
Battery Voltage.....	24V
Type of Fuel....	BSEN590 or ASTM D975 Class 1D and 2D.
Type of Oil.....	15W40 to API CI4.
Oil Capacity.....	40L
Type of Coolant.....	Glycol mixture
Coolant Capacity.....	51.4L
Heat Rejected To Exhaust System	251.8kW(14101BTU/min)
Heat Rejected To Water&Oil.....	118.4kW(6630BTU/min)
Back Pressure.....	N/A
Standby Power.....	320kW
Prime Power.....	280kW
Fuel Consumption(100%load).....	75L/h

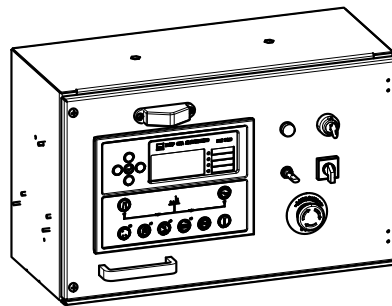
Alternator



1000103169-AP1-A1

Alternator Manufacturer/Brand.....	Leroy Somer
Alternator Model.....	LSA47.2VS1
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.....	0.9m³/s(50Hz), 1.1m³/s(60Hz)
Voltage Regulation.....	±0.5%
Total harmonic TGH / THCat no load	< 1,5 % - on load < 2 %
Telephone Interference.....	THF<2%; TIF<50

PLC-7420 Control System



1000191019-AP1-B2

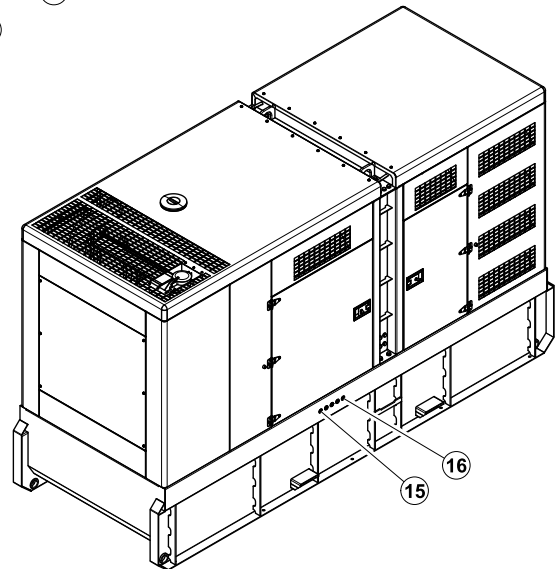
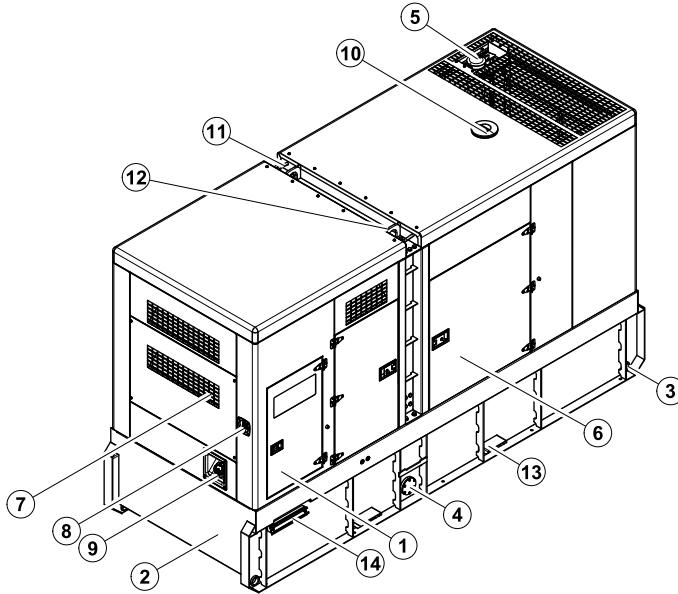
PLC-7420 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and 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

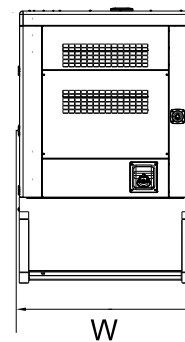
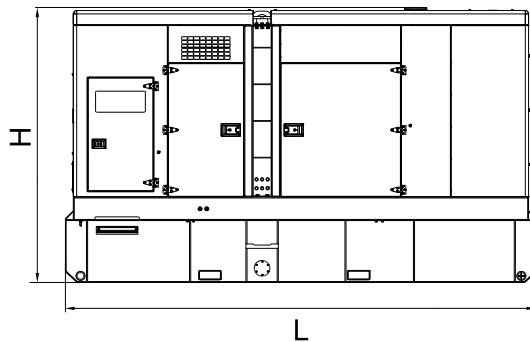
4 Overall Dimensions

1000023410-DR1-C4

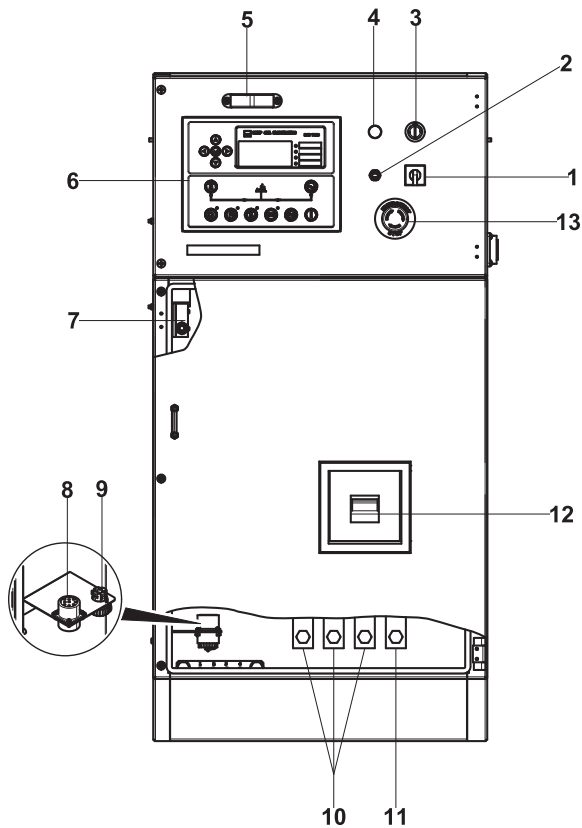
Dry weight	4648kg
Fuel tank capacity	1650L
Dimensions L x W x H	4242x1613x2476mm



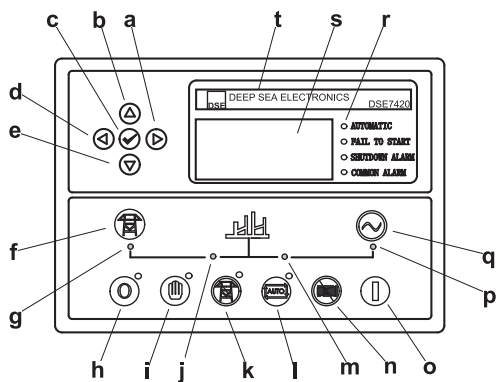
- ⑧ Emergency stop switch
- ⑦ Air inlet
- ⑥ Access door
- ⑤ Exhaust gas outlet
- ④ Fuel drain
- ③ Tie down
- ② Base frame
- ① Control cabinet
- ⑩ Coolant inlet
- ⑨ Fuel inlet
- ⑬ Fork lift channel
- ⑫ Lifting lug
- ⑪ Roping lug
- ⑭ Cable trench
- ⑮ Coolant/Oil drain hose fitting
- ⑯ External fuel inlet/return hose fitting



5 Control System



Control & Field wiring cabinet



Control module

Ref.	Description
1	Mains input changeover switch
2	Control cabinet lamp switch
3	Key switch
4	Charge indicator
5	Control cabinet lamp
6	Control module
7	Limit switch
8	ATS communication interface
9	Remote run connector
10	Live wire terminals
11	Neutral wire terminal
12	Main circuit breaker
13	Emergency stop switch

a	Button (next page)
b	Button (increase value / previous item)
c	Button (accept)
d	Button (previous page)
e	Button (decrease value / next item)
f	Button (transfer the load to the mains supply, when in Manual mode only)
g	Mains supply available LED
h	Stop / Reset button
i	Manual button (Manual control mode)
j	Mains supply on load LED
k	Test button (Test mode)
l	Auto button (Auto mode)
m	Genset on load LED
n	Mute/Lamp test button
o	Start button (Manual)
p	Genset available LED
q	Button (transfer the load to the genset, when in Manual mode only)
r	Alarm LED (4 alarm items)
s	LCD display
t	Control module name