

Generator set
Sound-proof type
PC30S-AU

SPECIFICATIONS





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 80%.
- Altitude: Below one thousand (1000) meters.

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.

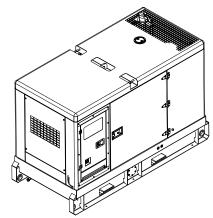
2 General Features

- Cummins engine 4B3.9-G1
- Close coupled to LSA alternator LSA42.3M8
- Microprocessor control module PLC-7420
- ABB Main circuit breaker: 160A
- Rotate speed governor: Mechanical governor
- · Excitation system: Self excited, SHUNT
- A.V.R model: R220
- · Key switch
- · Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 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 lifting lugs
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- · Base fuel tank for 23 hours running
- · Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

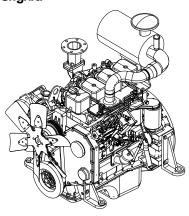
General technical data



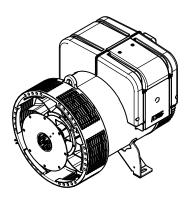
Model	PC30S-AU
Structure type	R
Tank capacity	165L
Dry weight	1283kg
Noise level @7m	66.0dBA
Dimensions L×W×H	2298x1050x1460mm
Standby Power	33kVA/26kW
Prime Power	30kVA/24kW

Voltage		220V		230V		24	240V	
Ampere		136A		130A		12	125A	
Genset Fuel Consumption								
Frequency/Lo	ad	25%	5	0%	75%	100%	110%	
50Hz (L/h)		2.8	4	1.3	5.7	7.1	8.0	

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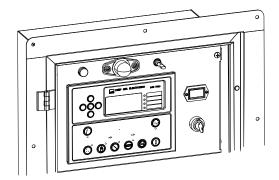


Engine Manufacturer/Bra	andCummins
Engine Model	4B3.9-G1
Dimensions L×W×H	875×703.6×1056.2mm
Dry Weigh (approx.)	308kg
Number of Cylinders	4
Bore	102mm
Stroke	120mm
Displacement	3.9L
Compression Ratio	17.3
Type of injection	Indirect injection
Intake System	Natural aspirated
Intake Resistance	<u>≦</u> 6.0kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12V/24V
Type of Fuel	. EPA2D 89.330-96/CEC RF-06-99
Type of Oil	API-CH-4/ ACEA E5
Oil Capacity	10.9L
Type of Coolant	Glycol mixture
Coolant Capacity(Engine	Only)7.2L
Back Pressure	≦10.2kPa
Standby Power	27kW
Prime Power	24kW
Fuel Consumption(100%	load)245g/kWh



Alternator Manufacturer/Bra	andLeroy Somer
Alternator Model	LSA42.3M8
Exciter	Brushless
Cooling Fan	Plastic
Windings	100% copper
Insulation Class	H
Winding Pitch	2/3
Terminals	4
Drip Proof	IP23
Altitude	≤1000m
Overspeed	2250rpm
Air Flow 0.1	35m³/s(50HZ),0.165m³/s(60HZ)
Voltage Regulation	±1.0 %
Total harmonic TGH / THC	at no load < 1.5 % - on load < 5%
Telephone Interference	THF<2%;TIF<50

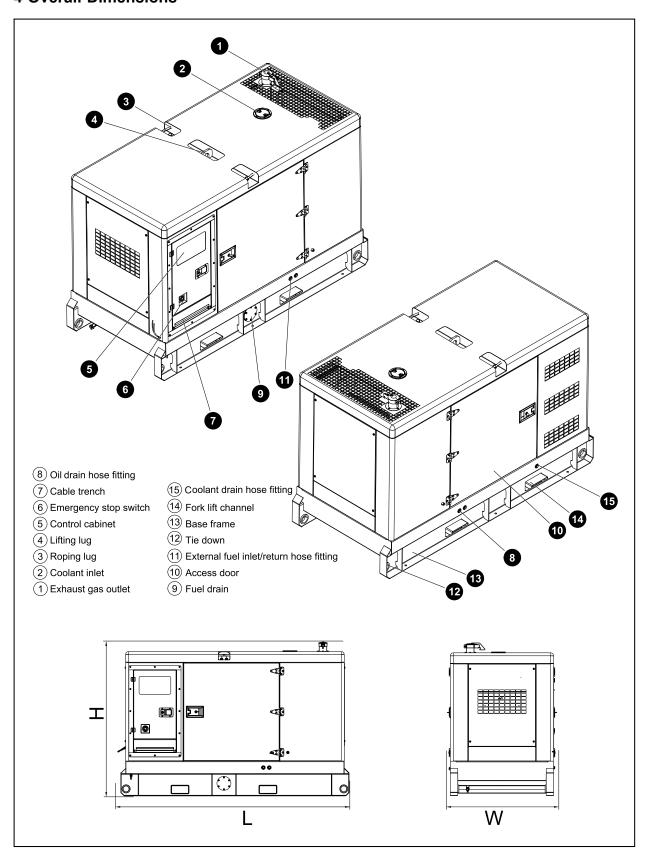
PLC-7420 Control System



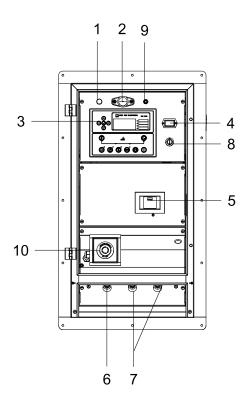
PLC-7420 is an advanced control module based on microprocessor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and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

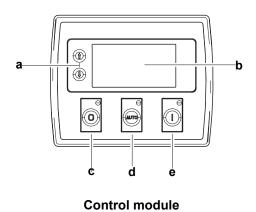


5 Control System



Ref.	Description
1	Indicator
2	Control cabinet lamp
3	Control module
4	Time counter
5	Main circuit breaker
6	Neutral wire terminal
7	Live wire terminals
8	Key switch
9	Control cabinet lamp switch
10	Emergency stop switch

Control & Field wiring cabinet



Ref.	Description
а	Navigation button£» Accept (Configuration mode only)
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)

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