

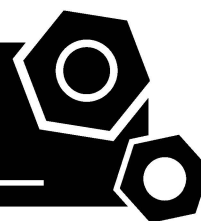


Generator set

Containerized type

B2500E3C-AU

SPECIFICATIONS



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 45°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 and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

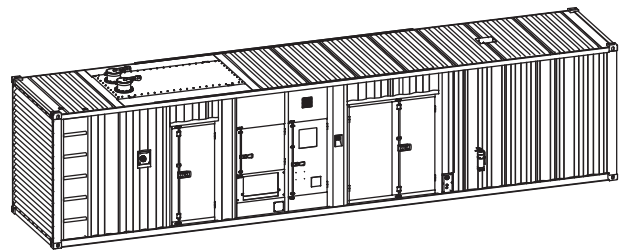
2 General Features

- Baudouin engine 12M55G4D3/5
- Close coupled to Leroy Somer alternator LSA52.3L12
- Microprocessor control module PLC-500
- ABB main circuit breaker: 4000A, 4P
- Rotate speed governor: ECU
- Excitation System: AREP
- A.V.R.Model: R550
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 4x12V/200AH sealed for life maintenance free battery
- Lockable battery isolator switch

- Powder coated canopy
- 50°C radiator
- Fire extinguisher
- Oil pump on the engine
- Steel base frame with forklifts
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Fuel tank for 4 hours running
- Drain points for fuel tank
- Fuel inlet pump and control box for the fuel tank
- Added fuel-water separator for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

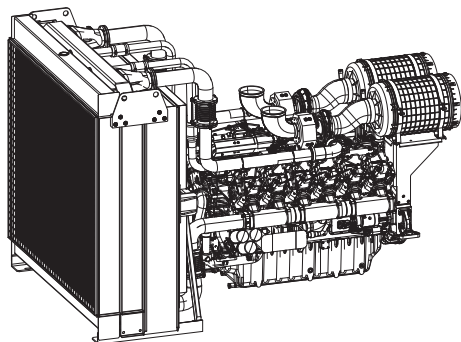
General technical data



Model.....	B2500E3C-AU			
Structure type	C			
Tank capacity.....	2400L			
Dry weight.....	25680kg			
Noise level @7m	85.0dBA			
Dimensions L×W×H.....	12192×2438×2896mm			
Standby Power	2750kVA/2200kW			
Prime Power	2500kVA/2000kW			

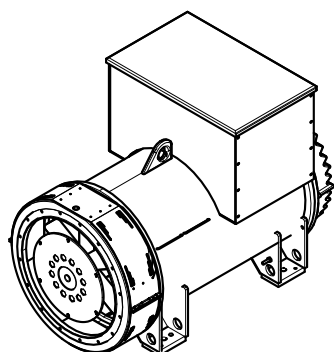
Voltage	380V	400V	415V	440V	
Ampere	3798.5A	3608.5A	3478.1A	3280.5A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	163.6	305.7	427.7	527.3	587.2

Diesel Engine



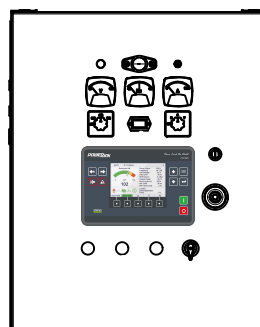
Engine Manufacturer/Brand.....	Baudouin
Engine Model.....	12M55G4D3/5
Dimensions L×W×H.....	2958×1544×2616mm
Dry Weigh (approx.)	9550kg
Number of Cylinders.....	12
Bore.....	180mm
Stroke	215mm
Displacement.....	65.65L
Compression Ratio	16.5
Type of Injection	High Pressure Common Rail
Intake System.....	Turbocharged and aftercooled
Intake Resistance	≤7.0kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	24V
Type of Fuel.....	BS2869 class A2 or BS EN590
Type of Oil	API CH4 15W/40
Oil Capacity	480L
Type of Coolant	Glycol mixture
Coolant capacity.....	306L
Back Pressure	≤15kPa
Standby Power	2450kW
Prime Power	2200kW
Fuel Consumption(100%load).....	527.3L/h

Alternator



Alternator Manufacturer/Brand	Leroy Somer
Alternator Model	LSA52.3L12
Exciter.....	Brushless
Cooling Fan	Cast alloy aluminum
Windings.....	100% copper
Insulation Class	H
Winding Pitch.....	2/3
Drip Proof	IP23
Overspeed	2250rpm
Voltage Regulation	±0.5%
Total harmonic TGH / THC	< 2.5%
Telephone Interference.....	THF<2%;TIF<50

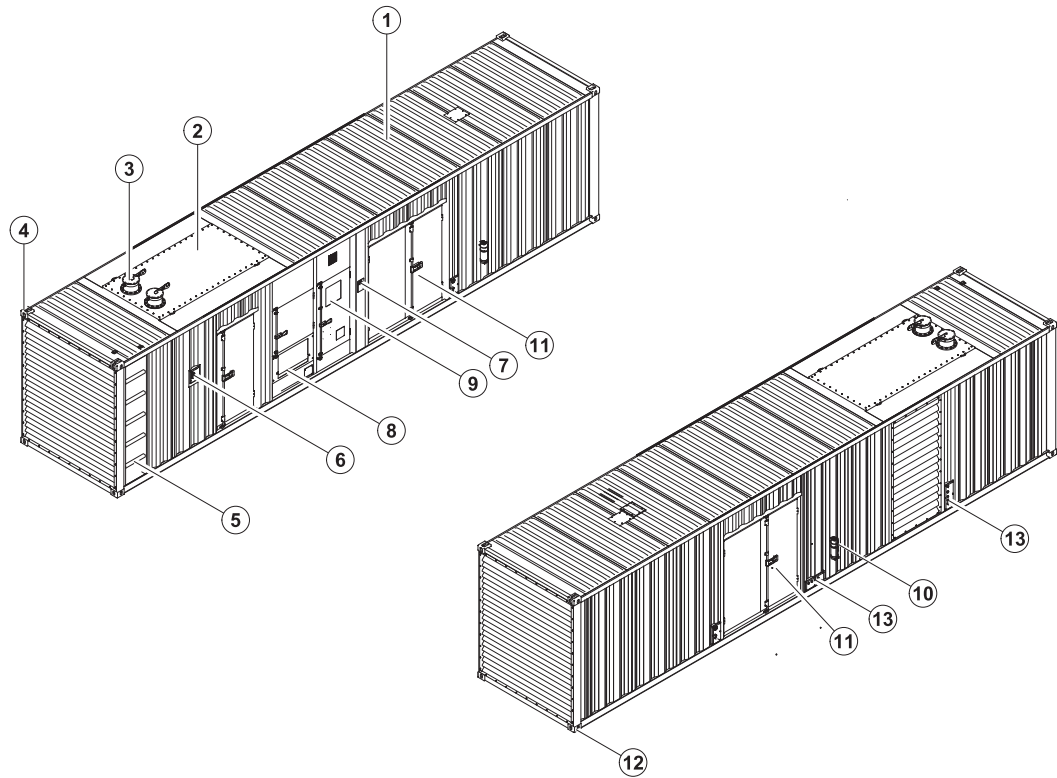
PLC-500 Control System



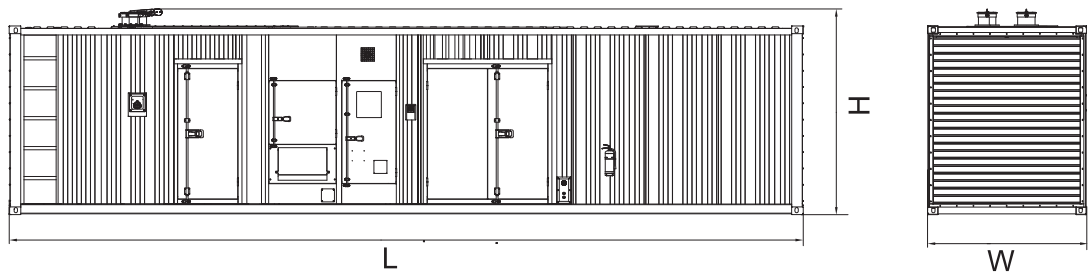
PLC-500 is a microprocessor based control unit containing all necessary functions for protection of the genset and the breaker control. Furthermore, it contains all necessary three-phase measuring circuits and presents all values and alarms on the LCD display. The module has the function of load sharing which enables the module to share the active load (kW) equally when operating in parallel with other gensets. The load sharing is performed so each genset takes a portion of the load that is calculated in percent according to the nominal power.

- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the 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
- RS232 & RS485 can be used at the same time
- Real time clock for time and date display, overall runtime display, 250 log entries

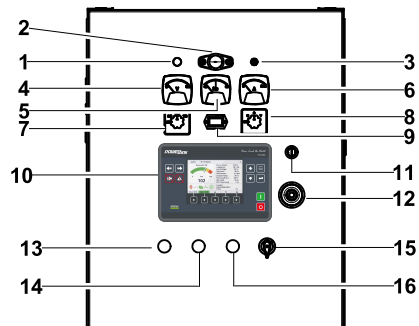
4 Overall Dimensions



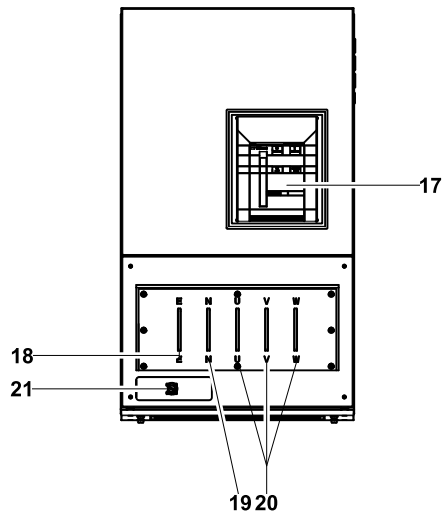
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|-------------------------|---|
| ⑦ Emergency stop switch | ⑬ External fuel inlet/return hose fitting |
| ⑥ Fuel inlet | Coolant/Oil drain hose fitting |
| ⑤ Ladder | ⑫ Fixing lug |
| ④ Lifting lug | ⑪ Access door |
| ③ Exhaust gas outlet | ⑩ Fire extinguisher |
| ② Muffler | ⑨ Control cabinet |
| ① Canopy | ⑧ Cable trench |



5 Control System



Control cabinet



Field wiring cabinet

Ref.	Description
1	Charge indicator
2	Control cabinet lamp
3	Control cabinet lamp switch
4	Voltage meter
5	Frequency meter
6	Current meter
7	Changerover switch-Voltage
8	Changerover switch-Current
9	Time counter
10	Control module
11	Key switch
12	Emergency stop switch
13	GCB closed indicator
14	GCB opened indicator
15	Control power switch
16	Alarm reset button
17	Main circuit breaker
18	Ground wire terminal
19	Neutral wire terminal
20	Live wire terminals
21	Paralleling connector with the mains

1000035666-A2-E
01.2023