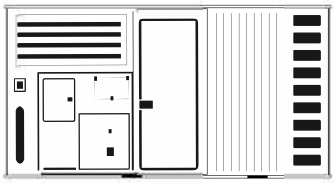
POWERINK
Power Systems



Generator set

Containerized type

B2000E3C-AU

SPECIFICATIONS

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EB series
B2000E3C-AU, STAGE III
50 Hz @ 1500rpm,3-phase/5-wiring

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℃ to 45℃.The coolant heater is needed when the temperature is below 5℃
- 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

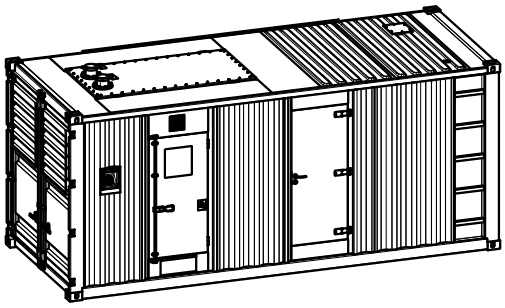
- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

2 General Features

- Baudouin engine 16M33G8D3/5
- Close coupled to Leroy Somer alternator LSA52.3S6
- Microprocessor control module PLC-500
- ABB main circuit breaker: 3200A, 4P
- Rotate speed governor: ECU
- Excitation System: AREP
- A.V.R.Model: R449
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 4x12V/150AH sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy
- 50℃ radiator
- Fire extinguisher
- Oil pump on the engine
- Steel base frame with forkslots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Fuel tank for 3 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

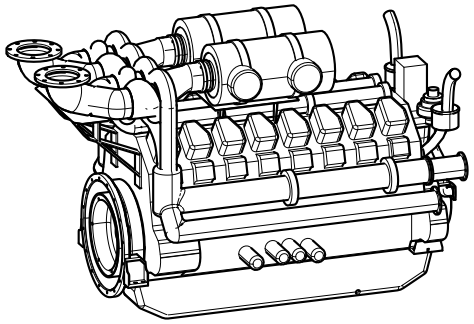


Model.....B2000E3C-AU
Structure type C
Tank capacity..... 1150L
Dry weight..... 15360kg
Noise level @7m 84.6dBA
Dimensions L×W×H.....6058x2438x2591mm
Standby Power 2250kVA/1800kW
Prime Power 2000kVA/1600kW

Voltage	380V	400V	415V	440V
Ampere	3039A	2887A	2782A	2624A

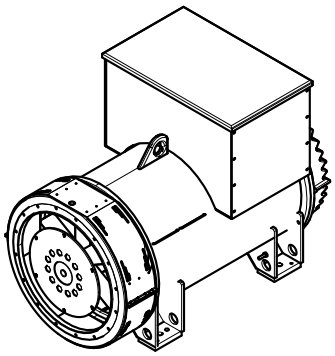
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	112	203	296	397	438

Diesel Engine



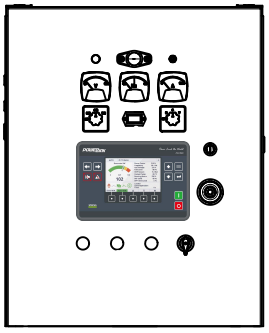
Engine Manufacturer/Brand..... Baudouin
Engine Model.....16M33G8D3/5
Dimensions L×W×H.....4116x2756x2870mm
Dry Weigh (approx.) 6825kg
Number of Cylinders.....16
Bore 150mm
Stroke 185mm
Displacement.....52.3L
Compression Ratio 15
Type of Injection ..... High Pressure Common Rail
Intake System..... Turbocharged and aftercooled
Intake Resistance .....≦6.2kPa
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 175L
Type of Coolant ..... Glycol mixture
Coolant capacity 542L
Back Pressure .....≦7.5kPa
Standby Power 1980kW
Prime Power 1800kW
Fuel Consumption(100%load).....397L/h

Alternator



Alternator Manufacturer/Brand ..... Leroy Somer
Alternator Model LSA52.3S6
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

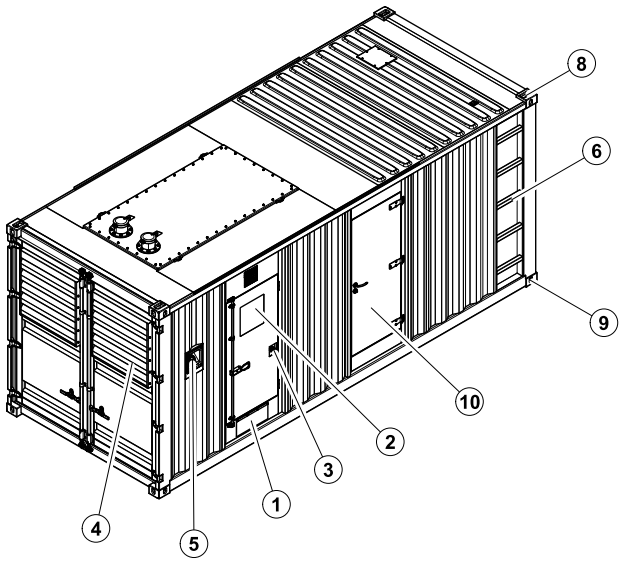
PLC-500 Control System

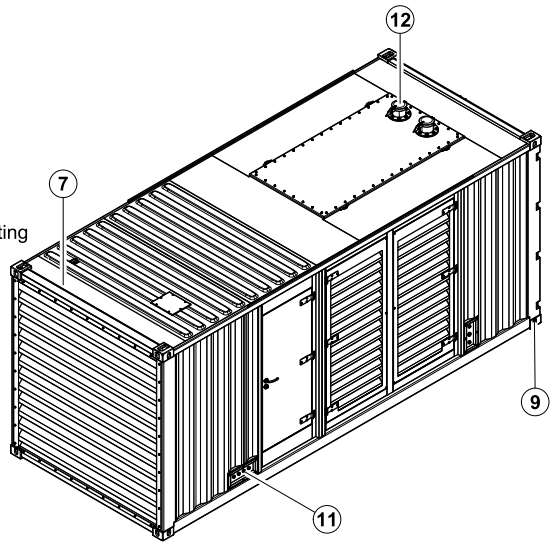


PLC-500 is a microprocessor based control unit containing all necessary functions for protection of the genset and the breaker control. Furthermore, it contains all necessary three-phase measuring circuits and presents all values and alarms on the LCD display. The module has the function of load sharing 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

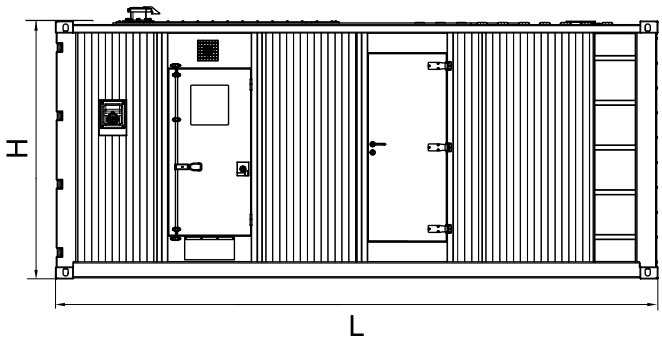
4 Overall Dimensions

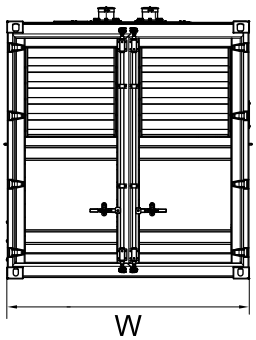




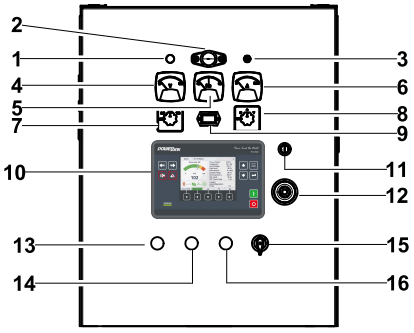
⑥ Ladder
⑤ Fuel inlet
④ Air inlet
③ Emergency stop switch
② Control cabinet
① Cable trench

⑫ Exhaust gas outlet
⑪ External fuel inlet/Return hose fitting
Coolant/Oil drain hose fitting
⑩ Access door
⑨ Fixing lug
⑧ Lifting lug
⑦ Canopy

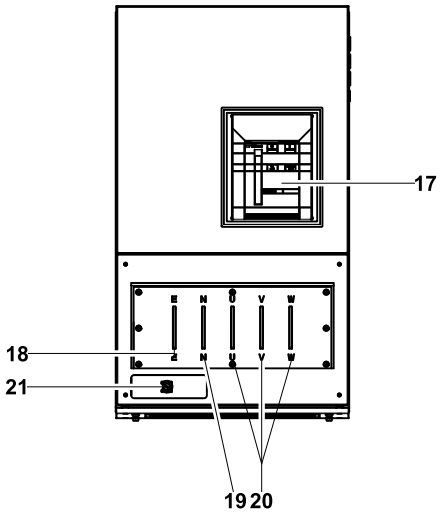




5 Control System



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

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